



PROSPECTUS 2012-13



PEC University of Technology
Chandigarh

PEC UNIVERSITY OF TECHNOLOGY CHANDIGARH

PROSPECTUS

Academic Session 2012-13

(A Deemed University under Section 3 of UGC Act, 1956)

(formerly Punjab Engineering College, Chandigarh)

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INTERIM BOARD OF MANAGEMENT(BOM)

Co-Chairperson : Sh. Vijoy Kumar Singh, Secretary, Technical Education, Chandigarh

Administration

Co-Chairperson : Prof. Manoj Datta, Director, PEC University of Technology, Chandigarh Member : Sh. Vijoy Kumar Singh, Finance Secretary, Chandigarh Administration

Member : Ms. Gurpreet Kaur Sapra, Joint Secretary, Technical Education, Chandigarh

Administration

Member : Sh. Arvind S. Sanghvi, Nominee of MHRD, Government of India

Member : Sh. Pawan Agarwal, Alumnus of the institute

Members : Prof. Uma Batra, Dean Research, Planning & Development

Members : Prof. Sanjeev Sofat, Dean Academic Affairs
Members : Prof. A M Kalra, Seniormost Professor

Members : Dr. Amit Halder, Seniormost Associate Professor

Secretary : Prof. Ashwani Kumar, Registrar, PEC University of Technology, Chandigarh,

SENATE

Chairman : Prof. Manoj Datta, Director
Member : Prof. A M Kalra, Deputy Director
Member : Nominee of Chairman BOG
Member : Nominee of Chairman BOG

Member
Member
Prof. R K Khitoliya
Member
Prof. Sanjeev Sofat
Member
Dr. Neelam Roop Parkash
Member
Dr. Balwinder Singh
Member
Dr. Arun Lall

Member : Dr. Uma Batra
Member : Dr. M M Goud
Member : Dr. R Sehmi
Member : Dr. Siby John

Member : Dr. Parminderjit Singh

Member
Member
Dr. R R Singh
Member
Sh. Kamal Kumar
Member
Ms. Maninder Kaur
Member
Sh. Sanjay Batish

Secretary : Prof. Ashwani Kumar, Registrar

DIRECTOR, DEPUTY DIRECTOR, REGISTRAR & DEANS

Director: Prof. Manoj DattaDeputy Director: Prof. A M KalraRegistrar: Prof. Ashwani Kumar

Dean Academic Affairs (DAA)

Dean Students Welfare (DSW)

Dean Research Planning & Development (DRP&D)

: Prof. Sanjeev Sofat

Prof. Parveen Kalra

Prof. Uma Batra

HEADS OF THE DEPARTMENTS

Head, Department of Aerospace Engineering Dr. P S Satsangi Head, Department of Applied Sciences Dr. Ashwani Kumar Head, Department of Civil Engineering Dr R K Khitoliya Head, Department of Computer Science & Engineering Dr. Sanjeev Sofat Head, Department of Electrical Engineering Dr. Balwinder Singh Head, Department of Electronics & Electrical Communication Engineering Dr. Neelam Roop Parkash Head, Department of Information Technology Dr. Balwinder Singh Head, Department of Mechanical Engineering Dr. Arun K Lall Head, Department of Materials & Metallurgical Engineering Dr. Uma Batra Head, Department of Production Engineering Dr. M M Gaud

COORDINATORS OF INTERDISCIPLINARY PROGRAMS

Coordinator, Total Quality Engineering and Management : Mr. P Thareja
Coordinator, Industrial Design : Dr. Parveen Kalra

ASSOCIATE DEANS

Associate Dean Academic Affairs (ADAA) : Dr. Sucheta

ADMINISTRATION

Central Public Information Officer (CPIO) : Dr. R Sehmi

Chairman CDMC Dean Academic Affairs Convener HOD Meetings Dr R K Khitoliya Coordinator IQAC Dr. Neena Gupta Liaison Officer (SC/ST/OBC), Mr. Roshan Lal Vigilance Officer Dr. R. Sehmi Project Officer Nodal Centre Mr. S K Suman OSD (Director -I) Mr. Sushant Samir OSD (Director -II) Dr. R M Belokar OSD (Director -III) Dr. P J Singh OSD (Deputy Director) Dr. Tripta Goyal Assistant Administrative Officer-I and O/I Legal Affairs Dr. Harminder Kaur Assistant Administrative Officer-II Dr. Tarlochan Kaur Assistant Administrative Officer-III and O/I MHRD, UGC, AICTE Dr. Tripta Goyal

Accreditation

CENTRAL FACILITIES

Training & Placement Officer (TPO)

Joint O/I Training & Placement I

Joint O/I Training & Placement II

Chairman Library

Head, Computer Center

Workshop Superintendent

in Dr. P J Singh

Dr. Anju Singla

Dr. R S Walia

Dr. Tarlochan Kaur

Head, Computer Center

in Mr. Sanjay Batish

Dr. N M Suri

O/I Furniture Maintenance : Workshop Superintendent
Joint O/I Furniture Maintenance : Mr. Rakesh Kumar, AE
O/I New Furniture : Mr. Rakesh Kumar, AE
O/I Transportation : Workshop Superintendent
Joint O/I Transportation : Mr. Rakesh Kumar, ME

O/I Guest House : Dr. P S Satsangi
Joint O/I Guest House : Dr. D R Prajapati

ACADEMIC AFFAIRS

O/I U.G.-I Dr. Satvendra Singh O/I U.G.-II Mr. Ajay Mittal Ms. Jyoti Kedia O/I U.G.-III Dr. Vasundhara Singh O/I Academic Collaborations and Student Exchange Ms. Rintu Khanna O/I Educational Technology O/I Technical Societies Ms. Raminder Kaur O/I Institute Publications Dr. Sucheta Joint O/I Institute Publications Dr. Asha Goel O/I Academic Web Server, Results and ERP Ms. Divva Bansal O/I Time Table and Date Sheet Dr. Alakesh Manna Joint O/I Time Table and Date Sheet Dr. T K Jindal O/I UG Admissions Dr. Sanjeev Kumar Dr. Pradeep Gupta Joint O/I UG Admissions Joint O/I UG Admissions Mr. Sanjay Batish Mr. Kishori Lal O/I PG (including admissions) Joint O/I PG (including admissions) Ms.Meena Mahajan O/I PhD (including admissions) Dr. Vasundhara Singh Joint O/I PhD (including admissions) Dr. Satyendra Singh

RESEARCH PLANNING AND DEVELOPMENT

O/I Consultancy

O/I Planning

O/I Sponsored Research

O/I Collaborations (Industry and Alumni)

O/I Courses and Conferences

O/I TEQIP - II

O/I Innovations, Incubation and IPR

Dr. S K Singh

Dr. Rita Mahajan

Dr. Vasundhara Singh

Dr. R S Walia

Mr. J D Sharma

Dr. Tilak Thakur

Dr. P S Satsangi

STUDENTS WELFARE

Chairman Committee of Wardens Dr. S K Mangal Chairman Sports Committee Mr. S K Sharma Chief Club President Mr. K K Gogna Warden Shivalik Hostel Mr. Dina Nath Deputy Warden Shivalik Hostel Mr. Sushil Kumar Warden Kurukshetra Hostel Mr. S K Sharma Deputy Warden Kurukshetra Hostel Dr. R S Walia Warden Himalaya Hostel Dr. D R Prajapati Deputy Warden Himalaya Hostel Dr. Satyendra Singh Warden Aravli Hostel Mr. Afaq Alam Deputy Warden Aravli Hostel Mr. Rakesh Kumar, AE Warden Vindhya Hostel Dr. Neena Gupta Deputy Warden Vindhya Hostel Dr. Anju Singla Warden Kalpana Chawla Hostel Ms. Shobhna Dhiman Deputy Warden Kalpana Chawla Hostel Ms. Alka Jindal O/I Student Publications Mr. J D Sharma O/I Student Counseling Ms. Puneet Chawla O/I N.C.C. Dr. R S Walia O/I N. S. S. Mr. Sushant Samir Dr. Satyendra Singh O/I Auditorium O/I Dispensary Dr. Asha Goel Student Liaison Officer (SC/ST/OBC) Dr. Balwinder Singh

O/I Scholarships
Joint O/I Scholarships
C/I Canteen
C/I Anti Ragging
Proctor
C/I Tutor Ward Scheme

Dr. Sucheta
Ms. Padmavati
Mr. K.K. Gogna
Mr. S.K. Sharma
Mr. Dina Nath
Mr. Sushil Kumar

ALUMNI AFFAIRS

Chairman Alumni Affairs : Mr. K K Garg
O/I Alumni Affairs : Ms. Divya Bansal
Joint O/I Alumni Affairs : Mr. Arvind Kakria

ESTATE AND WORKS

Chairman Estate and Works Mr. S K Suman Coordinator, Major New Construction Projects Mr. Roshan Lal : Works Coordinator Dr. Shakti Kumar : Joint Works Coordinator Mr. Suman Kant **Estate Officer** Dr. R M Belokar O/I Buildings **Works Coordinator** O/I Roads and Footpaths Dr. Pradeep Gupta Mr. Jagdish Kumar O/I Electrical Installations O/I Water Supply, Sewerage, Storm Water Drainage Dr. Umesh Sharma O/I Telephones Mr. Ajay Mittal Joint O/I Telephones Mr. Arvind Kakria O/I Air Conditioners & Water Coolers Mr. Suman Kant O/I Security and O/I Boundary Wall Mr. Dina Nath Joint O/I Security Mr. Rahul Vaishya O/I Gardening **Estate Officer** O/I Sanitation **Estate Officer** O/I Special facilities Mr. Bipin Kaushal Dr.T K Jindal Joint. O/I Special facilities O/I Liveries Dr. R S Walia O/I Fire Fighting Services Mr. Jagdish Kumar O/I Academic Infrastructure Ms. Rintu Khanna

PUBLIC RELATIONS

Public Relations Officer: Ms. Sovina SoodO/I Website content: Ms. Rupali SyalJoint O/I Website content: Ms. PadmawatiO/I Newsletter: Ms. Jyoti KediaJoint O/I Newsletter: Ms. Alka Jindal

1. INTRODUCTION

1.1 Brief History

The PEC University of Technology was originally established as Mugalpura Engineering College at Lahore (now in Pakistan) on November 9, 1921. The name of the institute was later changed to Maclagan Engineering College and it started functioning under this name on March 19, 1924. In the year 1931, the institute got affiliated to Punjab University, Lahore. After partition in 1947, the institute was shifted to Roorkee (India) and was renamed as East Punjab Institute of Engineering. In the year 1950, the word 'East' was dropped and it came to be known by its now popular name – PEC (Punjab Engineering College).

Towards the end of December 1953, the institute shifted to its present campus in Chandigarh to function under Govt. of Punjab. In 1966, with the formation of Union Territory of Chandigarh, the institute came under the control of the Chandigarh Administration.

In October 2003, the Govt. of India notified the Punjab Engineering College as a Deemed to be University. In June 2009, the institute was accordingly rechristened as PEC University of Technology.

The Institute is governed by a Board of Management and gets a grant-in-aid from the Chandigarh Administration.

The institute, in its new set up has introduced policies and programmes which are at par with those at IITs and other best institutions in the world.

1.2 Location

The institute campus is situated in Sector12 at the northern end of Chandigarh. It is a few minutes walk from Rajendra Park, the Punjab and Haryana Civil Secretariat, the Panjab University and the Postgraduate Institute of Medical Education and Research (PGI) .The Campus is 9 km from the Chandigarh Railway Station and 8 km from the main Bus Stand.

Chandigarh is the first planned city of India. It is at present the capital of the States of Punjab and Haryana and the Union Territory of Chandigarh. The average temperature during winter varies from 4° C to 28° C and during summer from 34° C to 45° C.

1.3 Campus

The institute campus extends over an area of 146 acres of land situated close to the beautiful Shivalik Hills. The campus is divided into various functional zones like hostels, main institute building, administrative block, residential complex for faculty and staff and a shopping centre. In addition to lecture theatres, tutorial rooms and drawing halls, the institute has auditorium, library, computer centre, reading rooms, workshops and well equipped laboratories. The institute has spacious playgrounds, tennis courts, squash courts, swimming pool, gymnasium and a student centre. Banking facilities with nationally connected ATMs along with a computerized post office are available. Adequate hostel facilities for both boys and girls are available on the institute campus.

2. ACADEMIC PROGRAMMES

2.1 Undergraduate Programmes

Four year undergraduate programmes leading to the degree of Bachelor of Engineering (B.E.) are offered in the following disciplines

- 1. Aerospace Engineering
- 2 Civil Engineering
- 3 Computer Science & Engineering
- 4 Electrical Engineering
- 5 Electronics & Electrical Communication
- 6 Information Technology
- 7 Mechanical Engineering
- 8 Materials & Metallurgical Engineering
- 9 Production Engineering

For detailed Rules and Regulations of Undergraduate Programmes, see Annexure "I"

2.2 Postgraduate Programmes

2.2.1 M.E. Programmes

Two year programmes leading to the degree of Master of Engineering (M.E.) are offered in the following disciplines:

- 1. Civil Engineering (Highways)
- 2. Civil Engineering(Irrigation and Hydraulics)
- 3. Civil Engineering (Structures)
- 4. Civil Engineering (Environmental Engineering) An Inter disciplinary Programme
- 5. Computer Science & Engineering
- 6. Computer Science & Engineering (Information Security) A self-supporting Programme
- 7. Electrical Engineering
- 8. Electronics Engineering
- 9. Electronics Engineering (VLSI Design)
- 10. Industrial Materials & Metallurgy
- 11. Mechanical Engineering
- 12. Production Engineering
- 13. Total Quality Engineering and Management –A self-supporting, Inter disciplinary Programme
- 14. Industrial Design A self-supporting, Inter disciplinary Programme

For detailed Rules and Regulations of M.E. Programmes, see Annexure "II"

2.2.2 Ph.D. Programmes

The Institute has a regular Ph.D. programme leading to the degree of Doctor of Philosophy (Ph.D.) in areas of Basic Sciences, Management and different disciplines of Engineering.

For detailed Rules and Regulations of Ph.D. Programmes, see Annexure "III"

3. DEPARTMENTS

3.1 Department of Aerospace Engineering

Faculty Members

S.No.	Name	Designation	Field of Specialization
1	Dr. P.S. Satsangi Ph.D.	Head	Advanced Manufacturing Processes, Applied Thermodynamics, Production & Operations Management
2	Sh. Kishori Lal M.E.	Associate Professor	Aircraft Structures
3	Dr. Rakesh Kumar Ph.D.	Assistant Professor	Flight Mechanics
4	Sh. Rajesh Kumar M. Tech.	Assistant Professor	CFD
5	Dr. Tejinder Kumar Ph.D	Assistant Professor	Rotodynamic Machines
6	Sh. Y S Chauhan M.E.	Associate Professor*	Aircraft Propulsion, Wind Energy

^{*} reemployed after superannuation

Bachelor of Engineering

This department has been producing Aeronautical Engineers for all fields in the Aerospace applications. The course curriculum is made broad based with the inclusion of the subjects for Civil Aviation/maintenance, like Aircraft Maintenance Engineering. Emphasis is given on the area of Computational Fluid Dynamics as well. As of now, this department has contributed to the progress of Aerospace Engineering through its illustrious graduate Aeronautical Engineers at National and International level.

Laboratory Facilities

Apart from the common laboratory and workshop facilities in other sister departments, the Department of Aerospace Engineering has well equipped laboratory facilities of its own in the areas of Aerodynamic Aircraft Structures, Aircraft Propulsion, Aircraft Instruments and Aircraft Materials. The Department has also a Workshop in which the students are given training on typical manufacturing processes in the field of Aerospace Engineering.

Research and Consultancy

- 1. Facilities exist in the area of fluid mechanics, wind tunnel testing and testing of gaseous and liquid fuels.
- 2. Research facilities on Pulse Detonation Engine are being set-up in collaboration with TBRL, DRDO, Chandigarh.
- 3. An open jet supersonic Wind Tunnel Research facility is being installed

Employment Opportunities

The first batch of Aero-Engineering graduates passed out in the year 1964. Since then, the contribution of Aeronautical graduates from the PEC has been recognised in all the establishments wherever they have worked. With the liberal policies of GOI, the employment potential has grown further in private sector as well. Prominent amongst the employers are:

- 1. Ministry of Defence:
 - a. Indian Air-Force
 - b. Indian Navy
 - c. Indian Army
 - d. Naval Design
 - e. DRDO (ADE, GTRE, DRDL)
 - f. Aeronautical Development Agency (ADA)
 - g. DGE and A (Deptt. of Defence Production)
- 2. Aircraft manufacturers
 - a. Hindustan Aeronautics Limited (PSU)
 - b. Private Sector
- 3. Deptt. of Civil Aviation
 - a. DGCA
 - b. Airports Authority of India
- 4. CSIR: National Aerospace Laboratories
- 5. *Deptt.* of Space: ISRO (VSSC,SHAR)
- 6. Operators: Air India, Indian Airlines, Pawan Hans and Private Operators

Technical Branch

Technical Branch

Aviation Wing

7. I-T Sector

3.2 Department of Applied Sciences

Faculty Members

S.No.	Name	Designation	Field of Specialization
1	Dr. Ashwani Kumar Ph.D.	Professor & Head	Nuclear Theory
2	Dr. (Ms.) Ranjeet Kaur Sehmi Ph.D.	Professor	Number Theory
3	Dr. Amit Halder Ph.D.	Associate Professor	X-ray Crystallography, Relativity
4	Dr. (Ms.) Harminder Kaur Ph.D.	Associate Professor	Organometallics & Environment Chemistry
5	Dr. (Ms.) Sarla Kumari Ph.D.	Associate Professor	Organic Chemistry
6	Dr. (Ms.) Sucheta Ph.D.	Associate Professor	Modern Algebra, Computer Graphics
7	Dr. L .N .Sharma Ph.D.	Associate Professor	Geology, Remote Sensing
8	Dr. Vasundhara Singh Ph.D.	Associate Professor	Synthetic Organic Chemistry & Environmental Chemistry
9	Sh. K. K. Gogna M. Phil	Associate Professor	Real Analysis
10	Dr. (Ms.) Asha Goel Ph.D.	Associate Professor	Topology
11	Ms. Shobhna Dhiman M. Phil	Assistant Professor	Experimental Nuclear Physics
12	Dr. (Ms.) Anju Singla Ph.D.	Assistant Professor	Finance, Management
13	Dr. Satyendra Singh Ph.D.	Assistant Professor	Synthesis and Characterization of Nano Structures
14	Ms. Nipun Checkar M. Phil.	Assistant Professor	Mathematics
15	Dr. (Ms.) Prem Lata Ph.D.	Assistant Professor	Analytical Chemistry
16	Ms. Meena Mahajan M. Phil.	Assistant Professor	Mathematics
17	Ms. Sumati Mahajan M. Phil.	Assistant Professor	Mathematics
18	Dr. V.S. Kaushal Ph.D	Professor*	Theoretical Physics
19	Dr. M. L. Gupta Ph.D	Professor*	Finance, Management

^{*} reemployed after superannuation

The department comprises sections of Mathematics, Physics, Applied Chemistry, Engineering Geology and Humanities.

The department offers core courses in Mathematics, Physics, Chemistry, Engineering Geology and Humanities (Women in third World development, Sociology, Micro Economics, Public Administration, Management Concepts & Practices, Entrepreneurship, Economic Reforms in India, Business Environment & Industrial Legislation, Corporate Finance & Organizational Behavior) to all the undergraduate students. In addition, several courses in Mathematics e.g., Probability and Statistics, Numerical Analysis and Discrete Mathematics are offered to select Branches of Undergraduate Engineering according to the prescribed curriculum.

Courses in Advanced Mathematics and Environmental Engineering Chemistry are offered to postgraduate students of various branches of engineering.

Doctor of Philosophy

The department provides facilities for research leading to the degree of Doctor of Philosophy in the fields of Mathematics, Physics, Chemistry, Finance & Management, and Engineering Geology.

Laboratory Facilities

The department has well equipped laboratories to impart practical training to the students in the field of Physics, Chemistry and Engineering Geology.

Research and Consultancy

The department provides research facilities in the fields of Mathematics, Finance & Management, Theoretical Physics, Materials Science, Semiconductor Physics, Organometallics, Environmental Chemistry (Waste water treatment), Synthetic Organic Chemistry (Natural Products and Green Chemistry), Photo Catalysis, Analytical Chemistry, Adsorption Studies, Application of Remote Sensing and GIS to Water Logging, Land Slides, Road Networking and Ground Water Engineering.

Consultancy and testing facilities exist in the Chemistry Section for problems relating to Chemical Industry, in Humanities Section for Micro Financing & Organizational Development and in the Geology Section for Rock Testing and Field Survey.

3.3 Department of Civil Engineering

Faculty Members

S.No.	Name	Designation	Field of Specialization
1	Dr. A.M. Kalra Ph.D., FIE	Professor	Irrigation & Hydraulics; Water Resources
2	Dr. R.K. Khitoliya Ph.D., FIE, LLB,MISGE, LLM, Executive MBA(H.R.)	Professor & Head	General Civil Engineering
3	Dr. Siby John Ph.D.	Professor	Environmental Engineering
4	Sh. Satinder K. Sharma M.E.	Associate Professor	Environmental Engineering
5	Ms. Meena Aggarwal M.E.	Associate Professor	Highway Engineering
6	Sh. Roshan Lal M.E., MISTE, MICI	Associate Professor	Structural Engineering
7	Dr. Tripta Goyal Ph.D., FIE , MIRC, MISTE, MIUT	Associate Professor	Highway Engg; Traffic & Transportation Engineering
8	Dr. S.K. Singh Ph.D.	Associate Professor	Soil Mechanics & Foundation Engineering
9	Dr. Pardeep Kumar Gupta Ph.D., DIM, MIE, MISTE, MIRC, MASCE, MACI	Associate Professor	Highway Engineering; Geotechnical Engineering
10	Dr. Umesh Sharma Ph.D, MIRC, MIE, MIUT	Associate Professor	Highway Engineering; Geotechnical Engineering
11	Dr. Geeta Arora Ph.D.	Associate Professor	Environmental Engineering
12	Dr. S.K. Verma Ph.D.	Associate Professor	Structural Engineering
13	Mohd. Afaq Alam M.Sc. Engg.	Associate Professor	Water Resources
14	Dr. Shakti Kumar Ph.D.	Associate Professor	Environmental Engineering
15	Dr. R.R. Singh Ph.D	Assistant Professor	Construction Technology
16	Mrs. Anita Khanna M .E.	Assistant Professor	Structural Engineering
17	Ms. Sarita Singla M .E.	Assistant Professor	Structural Engineering
18	Sh. Kamal Kumar M .E.	Assistant Professor	Water Resources
19	Ms. Sovina Sood M .E.	Assistant Professor	Highway Engineering

Bachelor of Engineering

The undergraduate curriculum is broad based and is designed to introduce the students to a wide range of problems encountered by Civil Engineers in the field. A large number of elective subjects are offered to enable a student to study the area of his special interest in depth. Students are given practical problems of different areas as their projects. Survey camps and practical training are a part of the curriculum aimed at familiarizing the students with actual problems. The main areas of study are Structural Engineering, Transportation Engineering, Water Resources and Irrigation Engineering, Geotechnical Engs., Environmental Engineering and Construction Technology & Management.

Master of Engineering

Regular courses are offered in M.E. (Civil) in the following specializations:

1. Highway Engineering: This programme imparts advanced training to B.E. Civil Engg.

Graduates in the fields of Traffic and Transportation Engineering, Pavement Materials, Design of Pavements, Soil Mechanics and

Foundation Engg.

2. Irrigation & Hydraulics: In this programme advanced courses in the fields of Fluid Mechanics,

Hydrology, Dams, Ground Water Engineering, Water Resources, Planning and System Engineering, Computer Programming and Optimization Techniques, Irrigation and Drainage Design etc. are

offered.

3. Structural Engineering: In this programme, advanced courses in the fields of Concrete, Steel,

Structural Analysis, Computer Programming, Experimental Stress

Analysis and Pre-stressed Concrete etc. are offered.

4. Environmental Engg: In this inter-disciplinary programme, advanced courses in the fields of

Air and Noise Pollution, Water and Land Pollution, Advanced Water and Waste Water Treatment, Solid Waste Management, Microbiology, Ecology and Limnology, Environmental Legislation, Environmental Impact Assessment and Rural Environmental Sanitation etc. are offered.

Doctor of Philosophy

The department has experimental and computer facilities for doing research work leading to the degree of Doctor of Philosophy in the field of Structures, Highways, Geotechnical Engineering, Project & Construction Management, Irrigation and Hydraulics and Environmental Engineering.

Laboratory Facilities

The department has excellent laboratory facilities for experimental work. The major laboratories are in the fields of Experimental Stress Analysis, Highways Materials, Photogrammetry, Traffic Engg., Structural Engineering, Hydraulics, Concrete, Structural Models, Surveying, Soil Mechanics, Environmental Engineering, Fluid Mechanics and Materials Testing, Air, Water and Noise, Quality Testing.

Research and Consultancy

In addition to normal facilities, latest and precision equipment is available for conducting advanced research in the fields of Fiber Reinforced Concrete, Three Dimensional Photo-elasticity, Full-scale Testing, Highway Materials, Pavements, Soil Mechanics, Photogrammetry, Irrigation and Hydraulics, Design of Regulators, River Training, and Sediment Transport etc.

Facilities exist for providing consultancy in the fields of design of Multi-storeyed Buildings, Bridges, Thermal Power Plants, Building Tunnels, Dams, Controlled Concrete Mixes, Steel Structures, Highways and Airports, Bituminous Mixes, Industrial Structures, Water Tanks, Investigation of Soil for different types of Structures, Hydraulic Testing of Pipes, Model Testing, Ground Water Testing etc.

3.4 Department of Computer Science and Engineering

Faculty Members

S.No.	Name	Designation	Field of Specialization
1	Dr. Sanjiv Sofat	Professor & Head	Artificial Intelligence, Network Security,
	Ph.D.		Image Processing & Vision
2	Sh. Shailendra Singh	Assistant Professor	Artificial Intelligence, Natural Language
	M.E.		Processing, Neural Networks, Digital Image
			Processing
3	Dr. Trilok Chand	Assistant Professor	Network Technology, Computer
	Ph.D.		Communication Networks
4	Ms. Divya Bansal	Assistant Professor	Information Security, Wireless Networks and
	M.E		Mobile Computing
5	Sh. Ajay Mittal	Assistant Professor	Algorithm Design, Computer Graphics,
	M.E.		Computer Vision
6	Ms. Padmavati	Assistant Professor	Data Structures, Object Oriented Programming
	M.E.		& Technologies, Image Processing
7	Ms. Manavjeet Kaur	Contractual Faculty	Biometric Security, Image Processing
	M.Tech.		
8	Ms. Gagandeep Kaur	Contractual Faculty	Software Engineering
	M.Tech.		
9	Ms. Rupandeep Kaur	Contractual Faculty	Databases and Data Mining
	M.E.		
10	Mr, Lalit	Contractual Faculty	Wireless Security
	M.E.		

Bachelor of Engineering

Besides imparting theoretical knowledge, a lot of stress is laid on hands-on training and overall development of individual's personality. The teaching programs have been devised keeping in view close interaction with the industry. The students of this programme are exposed to subjects related to Computer Science & Engineering. The major subjects covered in this programme include Introduction to Computing, Data Structures, Computer Architecture, Microprocessors, Database Management Systems, Computer Graphics, Computer Networks, Operating System, Software Engineering and Project Management, Artificial Expert System, Network Security & Cryptography, System Software, Theory of Computation, etc.

The competence of the department is reflected in the growing demand for its fresh graduates. The number of recruiting companies has multiplied many folds in the last few years. Many alumni of the department are offering their expertise in India and abroad with companies like MICROSOFT, CISCO, IBM, SEAGATE etc.

Master of Engineering

The Department is offering two years program leading to the degree of Master of Engineering in "Computer Science & Engineering" with 25 students. The department is also offering two year Master's programme in computer Science & Engineering (Information Security) from the session 2010-11 which is a self-supported programme.

The courses offered to M.E. students are Advanced Algorithms, Distributed Operating System, Artificial Intelligence, Image Processing and Computer Vision, Object Oriented Modeling & Design, Digital System Design, Advanced Microprocessors, Network System Security, Advanced Computer Networks, Multimedia Communication Systems, Wireless LANs & Mobile Computing.

PhD Program:

Department also offers PhD program since research is one of the most significant activities of the department and the thrust areas include Information Security, Wireless Networking, Computer Vision & Image Processing, Wireless Sensor Networks, Bioinformatics etc.

Laboratory Facilities

All the Labs in the Department are very well equipped with all state of the art facilities ranging from basic equipment to advanced specialized equipment. Following are some of the labs in the Department

- Computer Networks & Mobile Computing Lab
- Embedded Operating System and Microprocessor Lab
- Artificial Intelligence Lab.
- Software Engineering & Programming Lab.
- Multimedia & Computer Vision Lab.
- High Performance Computing Lab

Different software and hardware have been added to the labs time to time which include Qualnet Simulator, Exata Emulator, Sea Max Analyzer Pro: Encoder / Generator software IEEE Wi Max 802.16- 2004-2005 standard, Biometric Authentication & Access Control Device, IBM Rational Rose Suite, Oracle 10g, Allegro Lisp 6.0, Borland C++, LAN Trainer kits, Apple Software packages, Apple iMacs, Wireless Mesh Access Point, Network Cameras, Handy Cams, Laptops, Apple and HCL servers, etc.

Research and Development

1. Sponsored Research Projects

Two sponsored research projects have been successfully undertaken in the Department:

- a. Design and Development of Dependable, Secure and Efficient Protocols for Wireless Mesh Networks (WMN): 46 lacs sponsored by DIT.
- b. "Development of cloud based framework for delivering security as a service" Rs 55 lacs Sponsored by DIT, Ministry of Communication & IT, and Govt. of India

3.5 Department of Electrical Engineering

Faculty Members

S.No.	Name	Designation	Field of Specialization
1	Dr Shiv Naryan	Professor	Control Systems
	Ph.D.		
2	Dr. Balwinder Singh Ph.D., MIEEE, MIE(I)	Associate Professor & Head	Power Apparatus & Systems
3	Sh. S.K. Suman M.E., LLB	Associate Professor	Power Systems
4	Dr. Tilak Thaku Ph.D.	Associate Professor	Power Systems, Electronics, Instrumentation
5	Dr. (Ms) Tirlochan Kaur Ph.D., MIE, LMISTE	Associate Professor	Power Systems
6	Ms. Sulata Bhandari M.Tech., LMISTE	Associate Professor	Control Systems
7	Sh. K. K. Garg M.Sc.Engg.,F.I.E.T.E	Associate Professor	Control Systems
8	Ms. Rintu Khanna M.E. (MIE), MIEEE	Assistant Professor	Power Systems
9	Ms. Puneet Chawla M.E.	Assistant Professor	Power Systems
10	Dr. Jagdish Kumar Ph.D.	Assistant Professor	Power Electronics
11	Ms Jaimala Gambhir M.E.	Assistant Professor	Integrated Power Systems
12	Ms. Loveleen Kaur M.E., LMISTE	Assistant Professor	Power Systems
13	Ms. Raminder Kaur M.E.	Assistant Professor	Power Systems
14	Ms. Sandeep Kaur M.E.	Assistant Professor	Power Systems
15	Ms. Rashmi Vikal M.E.	Contractual Faculty	Control Systems
16	Dr. Gurnam Singh Ph.D., F.I.E.T.E., MIEEE	Professor*	Computer Simulation, Microprocessor Interfacing & Applications, Power Electronics and its Applications
17	Dr. Darshan Singh Ph.D., M.Sc. (Engg.), LLB	Associate Professor*	Power Systems

^{*}reemployed after superannuation

The department offers a B.E. Degree Programme in Electrical Engineering and an M.E. Degree programme in Electrical Engineering with specialization in Electrical Power Systems, Power Electronics & Electric Drives and Control Systems. The department also offers a programme in Doctor of Philosophy in Electrical Engineering.

Bachelor of Engineering

The undergraduate programme has been developed to provide a sound foundation in Electrical Engineering. The main areas covered in the curriculum are Electrical Circuits, Electrical Measurement, Programming Methodology using 'C', Electric Power Generation, Transmission and Distribution, Electrical Machines, Electrical Engineering Materials, Digital Electronic Circuits and Devices, Control Engineering, Digital Systems and Microprocessor, Electromagnetic field theory, Microprocessors and Interfacing, Power Electronics, Computer Aided Power System Analysis, Electrical Machines Design, Electric Drives, Bio-Medical Engineering, Analog and Digital Communications, Elect. Engg. Economics,

High Voltage Engg., Modern Instrumentation Systems, Systems and Operations Research, Illumination Engineering.

The students of final year take up various projects on practical/industrial problems in areas related to Power Systems, Electrical Machines, Power Electronics & Electric Drives, Control Systems using hardware/software. In the curriculum there is a provision of an Industrial tour and Project based industrial training.

Master of Engineering

The Master of Engineering programme in Electrical Engineering provides a scope of specialization in the areas of Electrical Power Systems, Power Electronics & Electric Drives and Control Systems.

Doctor of Philosophy

The department offers a Ph.D. programme facilitating students to carry out research work in different areas of Electrical Engineering.

Laboratory Facilities

The department has excellent laboratories for conducting experimental and research work. The equipment and software available in the laboratories include:

- + DET5/4R(AVO International) and GEOHMS (Gossens Microwatts) Digital Earth Testers.
- + 300 KV Impulse Generator.
- + High Voltage Double Beam Oscilloscope.
- + Digital Storage Oscilloscope.
- + Interactive Grounding System Analysis Software.
- + Portable Load Manager.
- + ETAP Software.
- + PSCAD/EMTDC Software
- + MATLAB with Toolboxes and SIMULINK.
- + SPARD Software
- + ECG machine
- + Goniometer
- + ICAP-4-SPICE
- + CASPOC
- + P-SPICE (CADENCE ORCAD 16.0)

Research and Consultancy

The department provides research facilities in the following areas of Electrical Engineering:

- Power System Stability
- Power Flow Studies
- Power System Protection
- Grounding
- Design of Industrial Power Systems
- Reliability
- Finite Element Analysis
- Computer Applications
- System Optimization
- High Voltage Engineering
- Microprocessor Applications
- Expert Systems
- Illumination
- Energy Auditing
- Control Systems
- Power Electronics & Drives

Facilities exist for providing consultancy in the fields of design of Electrical Transmission and Distribution System, Power Flow Studies, Computation of Short Circuit Currents, Steady State and Transient Stability Studies of Power Systems and Computation of Dynamic Over Voltage in Power System, Design of Industrial Power Systems, Grounding, Design and Testing of Illumination, High Voltage Testing of Power Apparatus, Finite Element Analysis of Field Problems and Systems Optimization, Energy Auditing, Control Systems.

3.6 Department of Electronics and Electrical Communication

Faculty Members

S.No.	Name	Designation	Field of Specialization
1	Dr. Deepak Bagai Ph.D	Associate Professor	Communication Networks
2	Dr. (Ms.) Neelam R. Parkash Ph.D.	Associate Professor & Head	Digital System Design, VLSI Design Communication,
3	Dr. (Ms). Neena Gupta Ph.D., MIEEE, FIETE	Associate Professor	Communication, Optical Communication, Optoelectronics
4	Dr. Neelu Jain Ph.D., MIETE	Assistant Professor	Digital Signal Processing, Computer Architecture, Microprocessor
5	Sh. Nagendra Sah M.E.	Assistant Professor	GSM, Computer Networking, Wireless Communication
6	Ms. Jasbir Kaur M.E	Assistant Professor	Digital Design, Communication Systems
7	Ms. Divya M.E.	Assistant Professor	Digital Electronics, Control Systems, Optical Communication
8	Ms. Amita Soni M.E.	Assistant Professor	Mobile Communication, Communication Systems,
9	Mr. Bipan Chand Kaushal M.E.	Assistant Professor	Analog Electronics, Microelectronics
10	Ms. Rita Mahajan M.E.	Assistant Professor	Parallel Processing, VLSI Design, Virtual Instrumentation
11	Sh Sukhwinder Singh M.E.	Assistant Professor	Virtual Instrumentation, Image Processing, Embedded Systems
12	Sh. Arun Kumar Singh M.E.	Assistant Professor	Microwave Imaging, Antenna
13	Ms. Jyoti Kedia M.E.	Assistant Professor	Digital VLSI Design, VHDL

Bachelor of Engineering

The department offers a B.E programme in Electronics & Electrical Communication Engineering. The subjects covered in the Curriculum are Materials, Components and Processes involved in Electronics, Electronic Devices and Circuits, Microwave Engineering, Digital Design, Advanced Communication, Communication Engineering, Satellite Communication and Information Theory, Microprocessor, Audio Visual System, VLSI, Microprocessor & Microcontroller, Digital Signal Processing, Computer Architecture and Data Communication.

Master of Engineering

Two full time M.E. programmes namely ME (Electronics) and ME (VLSI) are being conducted in this department.

Doctor of Philosophy

The department has facilities for research leading to Ph.D. degree. During the last few years 12 Ph.D. degrees have been awarded, while some candidates are pursuing their research work leading to Ph.D.

Laboratory Facilities

The major laboratories are in the fields of Analog Electronics, Audio Visual System, Digital Electronics, Microprocessor & Communication, Microwaves, Opto Electronics, Neural Networks, Virtual Instrumentation, Computer Networks, VLSI design, DSP and Mechatronics.

The Optical Communication Lab is equipped with state of art equipments (both hardware & software), catering to experiments for B.E. students, conducting Project work, ME dissertations & research facilities.

Digital Signal Processing and Data Communication Lab is used for practical /project work in the area of DSP, data communication and computer architecture. It has 15 Pentium IV based computers, Image processing kit, DSP kits alongwith interface cards and data communication kits. It is also equipped with MATLAB, System View and Bloom with Digital Signal Processing Software.

Virtual Instrumentation Laboratory has a total of 8 work stations available to students. NI Labview 8 software is installed on each workstation with one multifunction data acquisition card for DAQ experiments. In addition, each system also has a PCI GPIB (i.e. BNC 2120) board along with an instrument simulator with both GPIB & RS232 cables.

VLSI Lab has Quartus II, Microwind 3 tools. Quartus gives advanced place and route algorithms enabling industry leading compile times, industry leading performance, and the highest logic utilization. Microwind 3 unifies schematic entry, pattern based simulator & 3 D viewer, net list extraction, BSIM 4 tutorial on MIOS devices and sign-off correlation to deliver unmatched design performance and designer productivity. This lab also has industry leading Synopsys toolsuite for VLSI design.

Communication Lab is equipped with demonstrator kits for AM, FM, PCM, TDM and Delta Modulation. It also has colour TV trainer and pattern generator.

The Microprocessor laboratory is equipped with 10 P-IV Computers, microprocessor kits, microcontroller kits of the types 8085, 8086, 8051 and PIC and Electronics workbench (multisim). The students of the Department also avail the facilities of the institute Computer Centre which comprises of 60-P-IV based systems with Multimedia Software and also the Centre for Computational Engineering, which is equipped with workstation and Pentium system.

Microwave Lab has IE3D and Micro software's for the design of active/passive components of microwave and antennas. In addition to these software tools lab is fully equipped with microwave kits/components for S band, X band experiments at BE/ME degree level.

Research and Consultancy

Facilities and expertise exist in the areas of Telecommunications, Digital Design, Optical Communication, Microprocessor applications, Microwave communication, VLSI and VI.

3.7 Department of Information Technology

Faculty Members

S.No.	Name	Designation	Field of Specialization
1	Dr. Balwinder Singh	Head	Power Apparatus & Systems
_	Ph.D., MIEEE, MIE(I)		
2	Ms. Alka Jindal	Assistant	Data Security, Image Processing, DBMS, Data
	M.E.	Professor	Mining, Multimedia
3	Ms. Rupali Syal	Assistant	Data Mining, Cryptography, Algorithms
	M.E.	Professor	
4	Ms. Richa Jindal	Contractual	Data Mining, Image Processing, Fuzzy Logic
	M.E.	Faculty	& Artificial Intelligence
5	Mr. Arvind Kakria	Contractual	Image Processing & Computer Vision
	M.E.	Faculty	
6	Ms. Navdeep Kaur	Contractual	Dot Net, Image Processing
	M.E.	Faculty	•

The department of Information Technology was set up in PEC University of Technology, Chandigarh in the academic session 2000-2001. The department offers a B.E. degree programme in Information Technology.

Bachelor of Engineering

The undergraduate curriculum is broad based and is designed to expose a student to more of technology courses at the very beginning of the academic programme. Design training is an integral part of our curricula. A total of 34 design points are offered. The students are encouraged to undertake extra learning units, assignments, Projects etc., over and above what is prescribed for the regular curriculum. Our students need to develop in an all round manner and must understand the human and the social contexts within which all professional activities take place. For this reason 9% content is related to humanities and social sciences. Humanities subjects include Economic Reforms in India, Organizational Behavior, Management Concepts & Practices and Women in Third World Development. Full semester Industrial Training is compulsory for 3rd year students in the sixth semester.

Laboratory Facilities

Extensive practical training marks the high point of the curriculum of the department of Information Technology with the facilities being provided to the students by means of a consortium of laboratories shared by related departments and courses, to ensure intensive interaction amongst students of different yet related fields.

3.8 Department of Mechanical Engineering

Faculty Members

S.No.	Name	Designation	Field of Specialization
1	Dr. Arun K Lall Ph.D.	Professor & Head	Computer Aided Engg., Finite Element Method & Simulation Design for Assembly and
	TH.D.		Manufacturing
2	Dr. V P Singh	Associate Professor	Mechanical Vibrations, Theory of Machines,
2	Ph.D.	Associate 1 folessor	Strength of Materials, Design, Kinematics and
	Th.D.		Dynamics of Machines
3	Dr. P S Satsangi	Associate Professor	Manufacturing Science, Applied
3	Ph.D.	Associate 1 Tolessor	Thermodynamics, Production Engineering
4	Dr. Parminder Jeet Singh	Associate Professor	Refrigeration and airconditioning,
4	Ph.D.	Associate 1 foressor	Thermodynamics
5	Sh. S K Soni	Associate Professor	Heat and Mass Transfer, Renewable Energy
3	M.Tech.	Associate 1 folessor	Sources, Thermodynamics
6	Dr. S K Mangal	Associate Professor	Solid Mechanics & Design, Digital Photo
U	Ph.D.	Associate i foressor	Elasticity, FEM, Fracture Mechanics
7	Dr. Sanjeev Kumar	Associate Professor	Production Engineering, Mechanical Behavior
,	Ph.D.	Associate I folessoi	of Materials
8	Dr. Alakesh Manna	Associate Professor	Production Engineering
O	Ph.D.	Associate I folessoi	1 Toduction Engineering
9	Sh. Rakesh Kumar	Associate Professor	Fluid Mechanics, Heat Transfer, Thermal
	M.E.	Associate Floressor	Engg.
10	Dr Sushant Samir	Assistant Professor	Automobile Engg., Machine Drawing,
10	Ph.D.	Assistant Froressor	Thermodynamics
11	Dr. D R Prajapati	Assistant Professor	Work Study, Quality Control, Production
11	Ph.D.	Assistant 1 foressor	Planning & Control, Industrial Engg &
	Th.D.		Management
12	Sh. Nitin Kumar	Assistant Professor	Industrial Engg, Strength of Materials, Low
12	M.Tech.	(On lien)	cost Automation
13	Sh. Rajesh Kanda	Assistant Professor	Strength of Materials, Machine Design
13	M.E.	71331314111 1 10103301	Strength of Materials, Machine Design
14	Dr. Sandeep Salodkar	Assistant Professor	Production Engineering
17	Ph.D.	Assistant Froressor	1 Toddetion Engineering
15	Sh. Sarbjit Singh	Assistant Professor	Robotics, Advance Manufacturing Process,
13	M.E.	71331314111 1 10103301	Welding Tech.
16	Sh. Gurpreet Singh	Assistant Professor	Engineering Drawing, Thermodynamics
10	M.E.	(Adhoc)	Engineering Drawing, Thermodynamics
17	Ms. Tejbir Kaur	Contractual Faculty	Production Engineering
1 /	M.E.	Contractual Faculty	1 Toddetion Engineering
	171,12,		

The department offers a BE Degree Programme in Mechanical Engineering. It also offers a programme leading to ME (Mechanical Engg.) with specialization in Rotodynamic Machines.

Bachelor of Engineering

The course aims at providing basic knowledge in Mechanical Engineering in areas like Mechanics, Strength of Materials, Dynamics of Machinery and Thermodynamics. It then proceeds to acquaint the students with machines for Energy Conversion, Transport Systems and Refrigeration and Air Conditioning. The programme also includes subjects in areas of Design Engineering. Production Engineering, Techniques of Management, Computer Programming and Numerical Analysis and CAD / CAM.

Master of Engineering

The course work provides advanced knowledge of Mathematics, Fluid Mechanics, Gas Dynamics which are then used to build advanced theory of Rotodynamic Machines, ultimately leading to the design of these machines. Different allied courses like Mechanical Behavior of Materials, Design of Pressure Vessels and Piping, Instrumentation, Advanced Mechanical Vibration etc. are also offered.

Doctor of Philosophy

The department has facilities for research leading to Ph.D. degree in various disciplines of Mechanical Engineering i.e. Thermal Engineering, Machine Design, Rotodynamic Machines, Pressure Vessels, Production & Industrial Engineering, Quality Control, etc.

Laboratory Facilities

The department has excellent facilities for practical and research work in the laboratories of Dynamics of Machines, Rotodynamic Machines, Hydraulic Machines, Thermal Engineering, Heat Transfer, Refrigeration and Air-Conditioning, Strength of Materials and Computer Aided Design. Some of the important areas covered are:

- Mechanical Design
- CAD/CAM
- Mechanical Vibrations, Balancing, Dynamics of Machines
- Pressure Vessels and Piping
- Welding
- Thermo Fluid Mechanics, Turbo Machinery, Gas Turbines, Compressible Fluid Flow
- Metal Working, Closed die forging
- CAM, CNC
- Robotics
- Industrial Management, Operations Research and Quality Control
- Heat and Mass Transfer, Heat Exchangers
- Solar Air-conditioning
- Automobiles

Facilities exist for consultancy work in Material Testing, Heat Transfer, Pressure Vessels, Machine Design, Fluid Mechanics, Machines and Automobiles and workshop.

3.9 Department of Materials & Metallurgical Engineering

Faculty Members

S.No.	Name	Designation	Field of Specialization					
1	Dr. Uma Batra	Professor & Head	Phase Transformations, Mechanical Behaviour of					
	Ph.D.		Materials, Structure & Properties of Materials					
2	Sh. P Thareja	Associate Professor	Foundry Design, Powder Metallurgy, Failure					
	M.E., F.I.E		Analysis, Corrosion, TQM, Lein Six Sigma					
	Sr. Member ASQ		Black Belt and EMS/QMS lead tutor					
3	Sh. R K Mahajan	Assistant Professor	Thermodynamics, Foundry, Cast Irons, Failure					
	B.E.		Analysis					
4	Sh. J D Sharma	Assistant Professor	Conductive Ceramics, Failure Analysis, Heat					
	M.E.		treatment and Material Development					
5	Ms. Tamanna	Contractual Faculty	Mechanical Metallurgy, Material Science, Powder					
	M.E.	·	Metallurgy					
6	Dr. Mamta	Contractual Faculty	Material Science & Solid State Devices					
	Ph.D.	·	Technology					

Bachelor of Engineering

The Department offers B.E. degree programme in Materials & Metallurgical Engineering. The programme aims at providing basic knowledge in the areas of making, shaping and treatment of metals and materials. The major subjects of study offered are Physical Metallurgy and Heat Treatment, Casting Technology, Mechanical Metallurgy, Electro Metallurgy and Corrosion, Powder Metallurgy, Experimental Techniques, Material Engineering, Non metallic materials, Introduction to Ceramics, Computer Programming, Computer aided Metallurgical Engineering Design, Design of Furnaces, Extractive Metallurgy of ferrous and non ferrous Metals; Alloy Steels and their Production; Kinetics and Thermodynamics of metallurgical processes and Total Quality Management. The department is equipping to conduct a new dual degree programme in Materials Engineering and Metallurgy planned from 2011.

Master of Engineering

The department started a full time M.E. course on 'Industrial Materials and Metallurgy' from July 1996 with an intake of 10 regular students and 5 sponsored students. It is an inter-disciplinary course formulated in the thrust area of materials and is open to graduates in Metallurgical, Mechanical and Production Engg.

The department is also the cognate department of a self - supporting Interdisciplinary Programme (IDP) – ME in Total Quality Engineering and Management. This Masters programme started wef July 2011 and provides in depth knowledge in the subjects of Strategic Management in Organizational Systems, Quality Tools and Techniques, Standardization in Organizational Systems, Project Management and Quality, Maintainability and Reliability Engineering etc. This programme is currently being run in the evening mode with duration of three years.

Doctor of Philosophy

The department has facilities to carry out research leading of Ph.D. in Metallurgical Engineering in the areas of Materials Development, Heat Treatment and Characterization of Materials and Alloys, Austempered Ductile and High Strength Low Alloy Steel.

Research and Consultancy

The department provides training & research facilities in the fields of development of different alloys, Powder Metallurgical Components, Physical Metallurgy, Heat Treatment and Industrial Metallurgy, Foundry and Total Quality Management and six sigma, and also provides professional training in these areas.

3.10 Department of Production Engineering

Faculty Members

S.No. Name		Designation	Field of Specialization					
1	Dr. Parveen Kalra	Professor	CAD/CAM & Robotics, FEM, Ergonomics					
2	Ph.D.	Associate Duefesser	CNC Mashings Mashing Tool Design EEM					
2	Sh. M.M. Gaud M.Tech.	Associate Professor & Head	CNC Machines, Machine Tool Design, FEM					
3	Dr. Narendra Mohan Ph.D.	Associate Professor	Welding Engineering, Metal Casting					
4	Dr. R.M. Belokar Ph.D., M.I.E.	Associate Professor	Manufacturing System Design, Value Engineering, Non –conventional Machining					
5	Sh. Suman Kant M.Tech.	Assistant Professor	Industrial Engineering					
6	Sh. C.S. Jawalkar M.E., M.B.A	Assistant Professor	Manufacturing Technology, Industrial- Management					
7	Dr. R.S. Walia Ph.D.	Assistant Professor	Advanced Manufacturing, FEM, Work System Design					
8	Sh. Rahul O Vaishya M.E.	Assistant Professor	CAD/CAM, Tool Design, FRP					
9	Sh. Dina Nath B.E	Associate Superintendent	Machine Drawing, Jig Tool& Die Design					

Bachelor of Engineering

The department offers a B.E. Degree Programme in Production Engineering with an intake of 30 students.

The curriculum of Bachelor of Engineering has been designed to provide competency in designing, implementing and managing manufacturing systems. The curriculum is a blend of theory and practical courses in the areas of design, manufacturing, industrial engineering and management. The 26 weeks inplant compulsory industrial training in industries of repute is a unique feature of the curriculum.

Master of Engineering

The department is offering 2 year Master of Engineering programme in Production & Industrial Engineering with an intake of 18 full time and 5 sponsored / part time students. The curriculum is a blend of advanced courses in Manufacturing and Industrial Engineering apart from courses in Advanced Mathematics and Design of Experiments and Research Methodology. The program requires two semesters of research work on an appropriate topic of Production / Industrial Engineering and submission of thesis after completion of research work.

The Production Engineering department is the cognate department of a self - supporting Interdisciplinary Programme (IDP) – ME in Industrial Design. This Masters programme started wef July 2011 and provides in depth knowledge of design processes and latest design tools like 3D scanning, rapid product development, high performance visualization etc. Availability of well-trained graduates in industrial design would result in upgradation of quality of engineering design, process design, design materials and also result in environmentally sound and socially and culturally relevant designs. The duration of this programme for regular students is two years.

Doctor of Philosophy

The department has facilities to carry out research leading to Ph.D. in the areas of Robotics and Computer Integrated Manufacturing, Non-Conventional Machining Processes, Welding Engineering and Industrial Engineering.

Laboratory Facilities

The department has well equipped Laboratories in the fields of Machine Tools and Metal Cutting, Welding, Metrology, New Technology, CAD/CAM & Work Study and Ergonomics.

Research and Consultancy

Facilities exist for taking up research projects and industrial consultancy in the areas of Welding Engineering, New Technology, Industrial Automation, Jigs, Fixtures, Tools and Die Design, Work Design & Ergonomics, Plant Layout and Material Handling, CNC Operations, Total Quality Management and Value Engineering.

Employment Opportunities

The students of Production Engineering are being employed in reputed organizations, such as: L&T Mumbai, Maruti Udyog Gurgaon, Escorts Ltd. Faridabad, Eicher Tractors Parwanoo, ISGEC Yamunanagar, Voltas Delhi, Godrej GE Mohali, Tata Motors, Dabur India Limited, TATA Consultancy, ABB, Hero Honda Motors etc.

4. CENTERS, INTERDISCIPLINARY PROGRAMMES AND RESEARCH GROUPS

4.1 Centers

4.1.1 Cyber Security Research Center

It is a unique first of its kind Research Centre having NASSCOM as consortium of industries, PEC as academia and DIT, Chandigarh Administration as administration amongst its collaborators. It has been established to provide research, training and advice to various stakeholders. The Cyber Security Research Centre, Chandigarh has executed varied programmes in the interest of diverse stakeholders.

4.1.2 PEC-Centre for Consultancy in Engineering (PEC-CCE)

PEC-Centre for Consultancy in Engineering (PEC-CCE), is a consultancy centre catering to the needs of various organizations for higher end Computations and Engineering solutions. In its endeavor to provide high end, cost effective and timely solutions to the departments. PEC-CCE has over the years provided solutions to various Government and Non-Government departments to help them store and manage their information in an effective and efficient manner. The decisions are quick regarding any kind of up gradation of the Human Resource, Software and Hardware Resource thus helping it to act in a best possible way for the successful implementation of the projects

4.2 Interdisciplinary Programmes

Two year Inter disciplinary programmes leading to the degree of Master of Engineering (M.E.) are offered in the following disciplines:

- 1. Civil Engineering (Environmental Engineering)
- 2. Total Quality Engineering and Management –A self-supporting Programme
- 3. Industrial Design A self-supporting Programme

4.3 Research Groups

Twenty five research groups are actively working in various thrust areas like Pulse Detonation ,High Performance Concrete, Remote sensing, Nanomaterials, Information Security Systems, Power System, VLSI, Microcontroller based System, Aerodynamics, Photonic Systems and Network Design in various departments. Various projects, expert lectures, involvement of BE/ME/PhD students in the projects are the activities undertaken by the research groups. Funding from TEQIP-11 is available to all research groups. Students are also paid under the 'Earn While You Learn' scheme.

5. CENTRAL FACILITIES

5.1 Computer Centre

The Computer Centre administers and manages the entire Campus Network which includes Departments, Centres, Main Administrative Block, Hostels and the Guest House of the Institute. Computer centre is central computational facility, remains open from 8.00 AM to 8.00 PM on all working days & Saturdays. The Centre has three labs and a server room. The Computational facility in Computer Centre includes HP, ACER, HCL Servers, 60 desktop computers and other peripherals. Windows & Linux environment are available to the users.

The Computer Centre is central place for campus-wide networking and Internet connectivity. Backbone connectivity initiates from this Centre and caters to more than 2000 nodes (wired/ wireless) across the campus. The Server Room of Centre has uninterrupted power supply facility and is equipped with:

Servers

- Web Server
- Academia Server
- E- Mail Server
- Anti-Virus Server

Application Servers:

- Robot Studio
- MATLAB
- ESTINET

Security Appliances

- Cisco ASA 5000
- Unified Threat Management System

Internet Bandwidth

- 16 Mbps (1:1) leased line connectivity.
- PEC is a partner of National Knowledge Network (NKN). The NKN is a state-of-the-art multigigabit pan-India network for providing a unified high speed network backbone for all knowledge related institutions in the country.

Campus network is based on Gigabit technology with layer-3, layer-2 manageable switches, routers, with optical fiber cable backbone.

For the security and accountability of Internet access, Centre has adopted a log based authenticity system which accounts for user time and surfing activities. Hardware based *Security wall* is configured to help, cut-out the Intrusion Activity. Security wall has in-built Intrusion Detection System (IDS).

Computer Centre has also extended the network/ Internet connectivity on wireless (Wi-Fi) to whole campus and hostels.

5.2 Workshop

The Institute Workshop imparts basic workshop training to the students of all the branches. The Workshop undertakes repair and maintenance work of all the departments and is a central facility for the fabrication of projects and other research and development works.

The Workshop has fully equipped Machine, Fitting, Electrical, Welding, Sheet Metal, Carpentry, Foundry, Smithy, Automobile, Electroplating and Pattern Shops. A one-month Vocational Training Course is offered to students of all branches of engineering with the help of well experienced and qualified staff.

5.3 Training and Placement Cell

The Training and Placement Cell is a vital organ of the institute. It acts as a link between industry and the students. It arranges seats for Second and Third Year students for practical training/internship, which is stipulated under their academic curriculum. The cell has the responsibility to invite the future employers of the students. The whole placement process is organized and executed by this cell. The campus interviews are held under the supervision and jurisdiction of this cell and the relevant feedback is obtained from the industry. The cell has kept a close liaison with many companies in the country.

The cell also arranges career talks for dissemination of knowledge regarding the employment opportunities in the industry related to the relevant fields and interests of the students. It keeps record of the students who undergo internships and the companies which come from recruitment.

The Training & Placement Cell firmly believes in 'Industry-Institute Interaction'. In order to accomplish the same, it organizes seminars and talks to provide a platform for the budding engineers to interact with professionals from various industries. It encourages visits to the industries by the institute students and arranges industrial problems to be worked out by students as part of their projects. It also takes suggestions from members of the industry regarding designing/changing of curriculum. The institute has signed MOUs with many industrial organizations and industrial chambers. Technical paper presentation contests are held in collaboration with industries to discuss new developments and trends.

5.4 Library

The Central Library is housed in an area of about 27000 sq. feet and organized into various sections, which are manned by professionally qualified staff. With a collection of about 1,18,118 volumes in science and technology, catering to the needs of about 2000 members (faculty, staff and students), imparting/perusing studies in nine different branches of engineering, it continuously acquires text and reference books. It has an impressive collection of print resources including books, journals, dissertations, standards, conference proceedings, reports and other materials. The library is a member of INDEST Consortium under the Ministry of HRD since 2003 and providing access to electronic journals of three commercial publishers/ learning societies: ASCE (American Society of Civil Engineers), ASME (American Society of Mechanical Engineers) and IEL (IEEE/IET Electronic Library) under the category of complimentary access for AICTE-sponsored institutions. Moreover, the library is subscribing to three additional databases namely Science Direct, Springer Link and ACM since 2009 under the category of self-supporting institutes. Consequently, the library is providing access to more than 1100 journals in electronic form to keep its readers abreast with the latest developments in Engineering & Technology. All these resources are available through campus LAN. In addition, the library is subscribing to 35 foreign and 44 Indian technical Journals in the print form for the calendar year 2012.

Having centrally air-conditioning facility with 250 seats in two spacious reading halls for reticent of its readers, the library functions from 9 AM to 8 PM / 11 PM (all week days during mid-term and term end examinations) with an open access system to maximize the use of library resources. The Central Library is also having Multimedia Section to make use of most popular mode of education i.e. Electronic Media with the help of Computers, LCD projector, TV, VCR, OHP, Slide Projector, CDs, Floppies, and collections of 1029 CDs, 143 Floppies, 25 DVDs and 581 video cassettes on various disciplines of technology. Online network connection has already been given to the library. Users can also access NPTEL courses on campus LAN since September 2011.

The databases of Circulation Section, Reference Section and Theses Section have been prepared using LibSys Software. The same are accessible through library webpage in the campus. The issue/return of documents using barcode technology has been functional since July 2008.

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6. ADMISSIONS

6.1 Undergraduate Programmes

- (i) Admissions to the B.E programmes are made once a year in July based on rank in AIEEE, conducted on an all India level by CBSE.
- (ii) The minimum academic qualification for admission is a pass in 10+2 or its equivalent examination with at least 60% marks in aggregate (55% marks in case of S.C./S.T./Physically Handicapped), conducted by a recognized Board/University/Council

The total number of seats available in the college is **390**. Fifty percent (50%) of these seats are offered to candidates under each of the following:

(a) CHANDIGARH QUOTA: for all those candidates who have passed their qualifying examination (10+2) from schools/colleges located in the Union Territory, Chandigarh and recognized by the Chandigarh Administration.

(b) ALL INDIA QUOTA: for candidates who have passed their qualifying examination (10+2), but are not covered under category (a) above.

BREAK-UP OF SEATS

S. No.	Category	% of Reservation	Seats
	(a) <u>Chandigarh Quota</u>		
(i)	Scheduled Castes	14%	27
(ii)	Son/ daughters/ spouses of Military/ Paramilitary Personnel	5%	10
(iii)	Physically handicapped	3%	06
(iv)	Children/Grandchildren of Freedom Fighters	2%	04
(v)	Sportspersons	2% of the total seats	08
(vi)	Open seats		140
	Total Seats (Chandigarh Quota)		195
	(b) <u>All India Quota</u>		
(i)	Scheduled Castes	15%	30
(ii)	Scheduled Tribes from all states and UTs of India	5%	09
(iii)	Sons/ daughters/ spouses of Military/ Paramilitary Personnel	5%	10
(iv)	Physically handicapped	3%	06
(v)	Children/Grandchildren of Freedom Fighters	2%	04
(vi)	Open seats		136
	Total Seats (All India Quota)		195

DETAILED BREAK-UP OF SEATS

S N	Category	Quota	Aeronautical	Civil	Computer Sc. & Engg.	Electrical	Electronics & Elec. Comm.	I.T.	Mechanical	Metallurgy	Production	Total
1.	(a)Scheduled Castes	Chandigarh Quota	1	5	2	4	4	2	4	3	2	27
		All India Quota	1	5	2	5	5	2	5	3	2	30
	(b) Scheduled Tribes	All India Quota	1	1	1	1	1	1	1	1	1	09
2.	Sons/Daughters/ Spouses of Military/ Paramilitary Personnel	Chandigarh Quota	1	1	1	1	1	2	1	1	1	10
		All India Quota	1	1	1	1	1	1	1	1	2	10
3.	Physically Handicapped	Chandigarh Quota	0	1	0	1	1	0	1	1	1	06
		All India Quota	0	1	0	1	1	1	1	1	0	06
4.	Children/Grandchildren of Freedom Fighters	Chandigarh Quota	0	1	0	1	1	0	1	0	0	04
		All India Quota	0	1	0	1	1	0	1	0	0	04
5.	Sportspersons*	Chandigarh Quota	0	1	1	1	1	1	1	1	1	08
	Open Category	Chandigarh Quota	8	21	11	22	22	10	22	14	10	140
6.		All India Quota	7	21	11	21	21	10	21	14	10	136
	Total 2				20	60	60	30	60	40	30	390

^{*} Only those candidates shall be considered who have obtained gradation certificates from the Sports Department of Chandigarh Administration before the last date of submission of application form. New/modified gradation certificates issued after the last date of submission of application form will not be entertained.

NOTE :

- (i) The total number of seats and their subsequent distribution within various categories and branches may be changed without prior notice.
- (ii) Reservation for wards of Kargil Martyrs shall be subject to the directions of the Chandigarh Administration at the time of counseling.

(c) Seat for Kashmiri Migrants

One additional seat is available for Kashmiri Migrants vide notification no. 19/1/3-IH(3)-2002/13345 dated 17.7.2001 of the Chandigarh Administration. This seat does not belong to any specific quota (Chandigarh / All India) and shall be filled in the branch of Electronics and Electrical Communication Engineering on the basis of the combined merit list drawn by CBSE based on AIEEE.

A candidate seeking admission against this reserved seat is required to produce a certificate, from the Deputy Commissioner / Relief Commissioner of the concerned district, to the effect that he/she belongs to a migrant family from Jammu & Kashmir. <u>The admission of a candidate against this category will be provisional, subject to the verification of his/her above mentioned certificate by the issuing authority.</u>

(d) Admission of International Students

Admission of foreign Nationals/Persons of Indian Origin (PIOs) /Non – Resident Indians (NRIs) to Undergraduate Engineering Programmes is coordinated by an Agency authorized for the purpose by the Govt. of India under DASA Scheme. **58** seats are available for admission of International Students at PEC University of Technology, Chandigarh.

6.2 Post Graduate Programmes

6.2.1 M.E. Programmes Admission Procedure and Rules

- 1. The admission to all the ME programmes except for ME in Computer Science & Engineering (Information Security), Industrial Design and Total Quality Engineering & Management (TQEM) will be regulated through Graduate Aptitude Test in Engineering (GATE) in the relevant branch. However, non-GATE-qualified students may also be considered for admission to M.E. courses provided seats remain vacant after considering all the GATE-qualified applicants for admission (also see clause 2 below). But, for ME Electronics Engineering & ME Computer Science & Engineering, Non-GATE-qualified candidates will be eligible for admission only against Sponsored/Part-time seats.
- 2. Candidates, who hold a B.E./B.Tech. Degree in the parent branch pertaining to the ME programme to which they are seeking admission and do not have a valid GATE score and candidates of non-parent branches (see Table-2), will be eligible for admission on the basis of their merit in the Entrance Test to be conducted by the concerned department of PEC.
- 3. All the candidates applying for ME Computer Science & Engineering (Information Security), Industrial Design and Total Quality Engineering & Management (TQEM) course will have to appear in the Entrance test conducted by the department.

A. Distribution of Seats

- 1. The discipline-wise and category-wise distribution of seats is given in Table -1.
- 2. Out of the seats meant for the candidates sponsored by the Central Government / State Government Autonomous Bodies / Public Limited Companies / AICTE approved institutes, one seat in each of the Civil Engineering (Structures), Environmental Engineering, Electronics Engineering and Mechanical Engineering programmes is reserved for the candidates sponsored by the DRDO. However, if any of the seats so reserved remains vacant, it shall be offered to the candidates sponsored by other Central Government / State Government Autonomous Bodies / Public Limited Companies / AICTE approved institutes.

TABLE -1 DISTRIBUTION OF SEATS

	ME Programme						Supernume	rary Seats
Sr. No.		SC	ST	Handicapped	General	Total	Candidates sponsored by Central/State Govt. Autonomous Bodies/Public Ltd. Companies/ AICTE recognized institutes	Part- time
1.	Civil Engineering (Highways)	3	1	*	14*	18	3	2
2.	Civil Engineering (Irrigation and Hydraulics)	3	1	*	14*	18	3	2
3.	Civil Engineering (Structures)	3	1	*	14*	18	3	2
4.	Environmental Engineering	3	1	*	14*	18	3	2
5.	Electrical Engineering**	4	2	1	18	25	3	2
6.	Mechanical Engineering	3	2	1	19	25	3	2
7.	Electronics Engineering	4	2	1	18	25	3	2
8.	Electronics (VLSI Design)	3	1	*	14*	18	3	2
9.	Industrial Materials and Metallurgy Engineering	2	1	0	15	18	3	2
10.	Production & Industrial Engineering	3	1	1	13	18	3	2
11.	Computer Science & Engineering	4	2	1	18	25	3	2
12.	Computer Science & Engineering (Information Security) on self-supporting basis	3	1	1	13	18	3	2
13.	Industrial Design on self-supporting basis	3	1	1	13	18	3	2
14.	Total Quality Engineering & Management (TQEM) on self-supporting basis Lin to a total of 2 seats	3	1	1	13	18	3	

^{*} Up to a total of 2 seats in the programme and wherever a handicapped seat is allotted there would be a corresponding reduction in general seats.

NOTE:.The total number of seats and their subsequent distribution within various categories and branches may be changed without prior notice.

^{**} Specialization in the areas of Control System and Power System / Power Electronics & Drives is allotted on merit basis.

B Eligibility for admission

1. A candidate must have obtained a B.E. / B.Tech. Degree from an IIT / AICTE approved college/a university recognized by UGC, in the relevant discipline as given in Table-2.

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A candidate must have cleared/completed A & B Sections of the Institution of Engineers (India), Calcutta, Examination; or I.E.T.E. Graduate Examination conducted by the Institution of Electronics and Telecommunication Engineers, New Delhi, in the relevant branch and must possess at least five years research / professional experience.

2. The candidate must possess qualifying degree with 60% marks or equivalent CGPA with 5% relaxation for SC/ST and Physically Handicapped category candidates.

Additional Requirements for Sponsored/Part-time Candidates

- 1. An applicant for a **Sponsored** seat must have a minimum of two years full time work experience, as on the last date of receipt of completed application form, in the sponsoring organization viz. Central / State Government Autonomous Body / Public Limited Company; or as a teacher in an AICTE approved institute. A sponsored candidate will be considered for admission in only that M.E. course for which he / she has been granted permission by his / her parent department / organization. The main activities of the sponsoring organization should relate to the course in which the candidate is seeking admission.
- 2. An applicant seeking **part-time** admission must have a minimum of two years full time work experience, as on the last date of receipt of completed application form, in the present organization viz. a registered firm/company/industry/educational and research institution/any Government Department or Government Autonomous Organization and will be considered for admission to the specialization for which he / she has been granted permission by his / her parent department.
- 3. Candidates sponsored by Central/State Govt. Autonomous Bodies/Public Ltd. Companies/AICTE approved institutes, for admission to ME Programmes, shall be allowed to attend the classes only after they submit the certificate of proceeding on leave from their parent organization.
- 4. If a sponsored/part-time candidate leaves his/her organization during the course of study, his / her name will be deemed to have been removed from the college rolls from the date he / she leaves that organization.

TABLE-2 Parent & Non-Parent B.E./B.Tech. Disciplines for various M.E. Programmes

Sr. No.	M.E.	Discipline(s) in wh	ich B.E./B.Tech. Degree	e required for admissio	n
	Programme	Parent Branch(es)	Basis of Inter-se merit (for parent branches)	Non-parent branches	Basis of Inter-se merit (for non- parent branches)
1.	Civil Engineering. (Highways)	Civil Engineering	GATE Score Entrance test for non-GATE candidates*	-	-
2.	Civil Engineering (Irrigation & Hydraulics)	Civil Engineering	-do-	-	-
3.	Civil Engineering (Structures)	Civil Engineering	-do-	-	-
4.	Environmental Engineering	Civil Engineering	-do-	Any degree in engineering & technology other than civil engineering /B.Arch./ M.Sc in Environment Science with Physics, Chemistry & Maths (P,C,M) at 10+2 level.	Entrance Test
5.	Electrical Engineering	i) Electrical Engineering / Electrical and Electronics Engineering / Instrumentation & Control for Specialization in area of Control System. (ii) Electrical Engineering /Electrical and Electronics Engineering for Specialization in area of Power System / Power electronics & Drives	-do-	-	-
6.	Mechanical Engineering	Mechanical / Aeronautical / Production / Production & Industrial Engineering	1) GATE Score 2) Entrance test for non-GATE candidates*	-	-
7.	Electronics Engineering	Electronics & Electrical Communication Engineering./ Electronics & Communication Engineering/ Electronics & Tele-communication Engineering	1) GATE Score	-	Entrance test for non-GATE candidates for sponsored/ part time categories only
8.	Electronics (VLSI Design)	Electronics & Electrical Communication Engineering./ Electronics & Communication Engineering/ Electronics & Tele-communication Engineering	1) GATE Score		Entrance test for non-GATE candidates for sponsored/ part time categories only
9.	Industrial Materials and Metallurgy	Metallurgy/ Materials Engineering	1) GATE Score 2) Entrance test for non-GATE candidates*	Mechanical/Producti on Engineering / M.Sc Material Science	1) GATE Score with priority to GATE Score in parent branch 2) Entrance test for non- GATE candidates*

10.	Production & Industrial Engineering	Production/ Production & Industrial/ Mechanical Engineering	-do-	-	-
11.	Computer Science & Engineering	Computer Science & Engineering/ Information Technology	1) GATE Score 2) Entrance test for non-GATE candidates*	Electronics & Communication/ Electronics & Electrical Communication/ Electrical Engineering	1. GATE Score in parent branch 2. Entrance Test for Non GATE candidates for Sponsored/Part Time categories only
12.	Computer Science & Engineering (Information Security) (Self supporting programme)	Computer Science & Engineering/ Information Technology	Entrance Test for all candidates	Electronics & Communication/Ele ctrical Engineering	Entrance Test for all candidates
13.	Industrial Design (Self supporting Programme)	All Branches of Engineering and Technology	Entrance Test for all candidates	Any Degree in Engineering & Technology other than degree in parent branch	Entrance Test for all candidates
14.	Total Quality Engineering and Management (TQEM) (Self supporting Programme)	All Branches of Engineering and Technology	Entrance test for all candidates		

C. Inter-se Merit for Admission

(a) GATE-qualified candidates

- 1. The inter-se merit of the candidates seeking admission to a particular ME Programme will be decided by their GATE score in the parent branch.
- 2. In case of a tie in GATE scores, the inter-se merit of the candidates will be decided by their score at the qualifying degree level. In case the qualifying degree marks are not available, seventh semester marks / marks at the last common level will be the deciding factor for the inter-se merit.
- 3. In case of candidates having the same score both in GATE and qualifying degree / at the last common level of comparison, seniority in age will decide their inter-se merit for admission, the oldest among them ranking highest in merit.

(b) Non GATE-qualified candidates and GATE candidates seeking admission in non-parent branch

1. Their merit will be based on the GATE Score/entrance test to be conducted for the programme by the respective departments as specified in Table 2. In case of any tie, their qualifying degree merit will be the deciding factor. In case the qualifying degree marks are not available, seventh semester marks / marks at the last common level will be the deciding factor for the inter-se merit.

2. In case of candidates having the same score both in GATE/entrance test and qualifying degree / at the last common level of comparison, seniority in age will decide their inter-se merit for admission, the oldest among them ranking highest in merit.

Important Note:

1. Non GATE-qualified candidates shall not be eligible for admission to the M.E. course in Electronics except for the Sponsored / Part-time seats, for which they will have to appear in the entrance test to be conducted by the department.

D. Procedure for filling up of seats reserved for Physically Handicapped candidates

- Applicants will be considered in this category only if the minimum loss of earning capacity due to handicap is 40% according to the criteria laid down in the standards of E.S.I Corporation of India. The candidate should submit, along with the application, a Medical Certificate of handicap, in the prescribed performa, from a Government Gazetted Medical Officer, for preliminary screening. If this certificate is not attached with the application, then the candidate will not be considered against the seats reserved for this category. The candidate will be called for interview on the basis of the certificate attached with the application.
- After provisional admission, the candidate will have to appear before the Medical Board constituted by the Principal Medical Officer, Govt. Multi-Speciality Hospital, Sector 16, Chandigarh, for determination of the percentage loss of earning capacity through handicap/disability and for getting a certificate to this effect. This certificate will also indicate the name of the disease causing the handicap; whether the handicap is progressive or non-progressive; and whether the candidate is able to carry on the studies and perform the duties of an engineer. The final admission will be based on this certificate issued by the Medical Board. In case any candidate does not present himself before the Medical Board on the date intimated to him, his /her candidature against this category will be rejected and no subsequent opportunity will be given to him/her.
- An applicant having a temporary or progressive handicap will not be considered for admission against the seats reserved for this category.
- If the requisite number of eligible physically handicapped candidates is not available, the unfilled seats belonging to this category will be treated as unreserved and will be filled up from amongst the candidates belonging to the General Category.

E. Procedure for filling up of unfilled sponsored / part-time seats

If the requisite number of eligible sponsored / part time candidates is not available, the unfilled seats belonging to these categories will not be filled since the seats for sponsored / part time candidates are supernumerary over and above the total number of seats.

F. Procedure for filling up of unfilled seats reserved for Scheduled Castes / Scheduled Tribes candidates

If the requisite number of Scheduled Tribes candidates is not available, unfilled seats belonging to this category will be offered to the Scheduled Castes candidates and vice versa. If some seats belonging to these categories remain vacant even after considering all the SC/ST candidates then such vacant seats will be treated as unreserved and will be filled up from amongst the candidates belonging to the General Category.

6.2.2 Ph.D Programmes

For admission to Ph.D. Programme See Annexure "III"

7. FEE

7.1 Fee payable by B.E. students of entry year 2011

One-time (at Admission only)	
Admission fee	₹ 3,000
One-time student service fee	₹ 5,000
Refundable deposit	₹ 5,000
Semester fees	
Academic	₹32,500
Other facilities & services	₹ 5,250
Total payable at the time of admission (for day scholar)	₹50,750

Every B.E. student admitted at PEC University of Technology, Chandigarh, is required to buy a laptop computer. This laptop will be required on the first day of the classes. College will make arrangements with a supplier, to make laptops available to the students at a heavy concession. However, a student is free to buy the laptop of the required specification from elsewhere if he can get it cheaper. Financial assistance to some needy students for buying laptops could be considered.

7.2 Fee payable by M.E. students of entry year 2011

	M.E. programmes	GATE qualified students of	Self - supporting
		M.E. programmes (excluding	
		self- supporting programmes)	
One-time (at Admission only)			
Admission fee	₹ 3,000	₹3,000	₹3,000
One-time student service fee	₹ 5,000	₹ 5,000	₹ 5,000
Refundable deposit	₹ 5,000	₹ 5,000	₹ 5,000
Semester fees			
Academic	₹32,500	₹15,000	₹57,500
Other facilities & services	₹ 5,250	₹ 5,250	₹ 5,250
Total payable at the time of	₹50,750	₹33,250	₹75,750
admission (for day scholar)	·		

7.3 Fee payable by Ph.D. Students

One-time (at Admission only)	
Admission fee	₹3,000
One-time student service fee	₹ 5,000
Refundable deposit	₹ 5,000
Annual fee	
Academic	₹5,000
Other facilities & services	₹ 10,000

Other facilities and services fee will not be payable by students who are pursuing the programme on a part-time basis.

7.4 Additional fee for hostelers

Refundable security	₹ 5,000
Hostel fee (Annual)	₹ 13,500
Hostel & Mess Establishment charges (Annual)	₹ 19,800
Mess Advance	₹ 2,500
Total additional sum payable for hostel facilities	₹40,800

Note: Every component of fee is subject to revision by the PEC University of Technology from time to time.

7.5 Fee Refund Rules for BE/ME

- 1. The amount of $\overline{1000}$ paid by a student at the time of counselling is non-refundable.
- 2. The refundable deposits will be fully refunded whenever the student withdraws his admission from the institute.
- 3. If a student after being granted admission pays the fee but *does not register* with the institute on the prescribed date, withdraws his admission and applies for refund before the date of final counselling, the entire fee paid by him/her shall be refunded except for the non-refundable ₹ 1000/- paid at the time of counselling.
- 4. If a student after being granted admission pays the fee and registers with the institute on the prescribed date but withdraws his admission later and applies for refund before the date of final counselling for admission for the particular year, his/her admission fee and ₹1000/- paid at the time of counselling will be forfeited. The other fees paid by him/her (including hostel/mess fees in case of a hosteler) will be refunded after making deductions proportionate to the entire period starting from the month of registration to the month of application for refund (part of each month being counted as a full month).
- 5. A student who withdraws his/her seat *after the final counselling for admissions for the year has taken place*, will not be entitled to refund of any fee paid by him/her except for the refundable deposits.
- 6. A candidate granted semester leave during a semester will have to pay the full fee for that particular semester, and as such will not be entitled for any refund of fee.
- 7. A student leaving a programme in between (on his / her own request) will not be entitled for any refund of fee

NOTE: In case the final counselling for admissions for a particular year is held before the date of registration, the rule 5 above, and the condition of "applying for refund before the date of final counselling" in rule 4, will be inoperative.

7.6 Miscellaneous Fees

1.	Theory Examination Fee (Re-appear)*	₹200/- per subject
2.	Practical Examination (Re-appear)/ Improvement of Sessional Fee *	₹200/- per subject
3.	Late Fee*	₹100/- per day after the last date of receipt of examination forms upto a maximum of five days. No forms to be accepted after that day.
4.	Degree in absentia/ Duplicate Degree / Revised Degree (after 6 months of issue) Fee	₹500/-
5.	Duplicate DMC / Revised (after 6 months of issue) DMC Fee	₹50/- per DMC
6.	Re-evaluation Fee	₹1000/- per subject for all classes
7.	Late Registration Fee	₹500/-
8.	ME / Ph.D. Thesis Examination Fee	₹1000/-
9.	Issue of Transcripts Fee	₹ 50/- per set

^{*} For students admitted prior to the year 2005 only.

8. SCHOLARSHIPS AWARDS AND MEDALS

8.1 Undergraduate Programmes

(i) For Scheduled Caste, Scheduled Tribe Students

Half free-ship on tuition fee shall be admissible to all the students belonging to the Scheduled Castes / Scheduled Tribes, who have cleared all their examinations up to previous year and who are not on academic or disciplinary probation.

(Note:- Free-ship would be discontinued if the student indulges in any act of indiscipline or violates the code of conduct.)

(ii) Merit Scholarship

Merit Scholarship in the form of full free ship on tuition fee would be provided to one student of each branch on the basis of branch-wise Merit.

Criterion for Award of Merit Scholarships

Merit Scholarships in the form of full free ship on tuition fee shall be awarded to the students on the basis of AIEEE rank for the first year, and on the basis of CGPA of previous year in second, third and final year provided it is not less than 6.5 subject to fulfillment of following further conditions:

- The students should have been admitted on the basis of AIEEE merit.
- The student has cleared all the examinations of the previous semester/year in the first available opportunity except for the audit course.
- > The student should not be on disciplinary probation
- Free-ship would be discontinued if the student fails in any of the subjects in subsequent odd semester except in physical education and/or his/her CGPA in the subsequent odd semester is less than 6.5
- Free-ship would be discontinued if the student indulges in any act of indiscipline or violates the code of conduct.

(iii) Fee waiver for Economically Weaker Sections/Women/Physically Handicapped students These fee-waivers in the form of full free-ship on tuition fee shall be awarded on the basis of AIEEE merit. Branch wise distribution of these fee waivers is as follows:

	AE	CE	CS	EE	EC	IT	ME	MT	PE	Total
Women	1	2	1	2	2	1	1	1	1	12
Physically Handicapped	ı	1	ı	1	1	1	1	1	1	07+01*
Economically Weaker Sections	1	3	1	3	3	1	3	2	1	18

^{*} This fee waiver would be awarded to a PH student of any branch on the basis of AIEEE merit

These fee waivers shall be awarded to a student subject to fulfillment of following further conditions:

- These fee-waivers in the form of full free-ship on tuition fee shall be awarded on the basis of AIEEE merit for the complete duration of the course i.e., for 4 years However, the awards would be continued in the subsequent years to only those students who have cleared all their examinations up to previous year and who are not on academic probation.
- The total annual income of the family of a student being awarded fee waiver under Economically Weaker Sections category should not exceed ₹2,50,000. For proof of family income from all sources the income certificate shall be accepted when issued by a competent authority, which shall mean Deputy Commissioner / Tehsildar / SDM or the employer as the case may be. In addition to this, an affidavit duly attested by a magistrate, giving full details of the family income should also be submitted

- ► He/She should not be on academic or disciplinary probation.
- > Free-ship would be discontinued if the student indulges in any act of indiscipline or violates the code of conduct.

The following methodology shall be adopted to deal with the situations of non availability of students in a specific category / branch:

- 1. In case the number of eligible candidates in a branch under a specific category is less than the number of scholarships in that branch, the excess scholarships would be transferred to the eligible candidates of the other branches under that specific category.
 - All such scholarships transferred from other branches within a specific category would be put in a common pool and awarded one by one to eligible candidates under that category as per the following criterion:
 - i. If the number of such scholarships is less than or equal to the number of branches with eligible candidates left, these scholarships would be awarded on the basis of AIEEE merit subject to the condition that not more than one scholarship is awarded to a particular branch.
 - ii. If the number of such scholarships is more than the number of branches left (say x) with eligible candidates, then first x scholarships would be awarded on the basis of AIEEE merit subject to the condition that not more than one scholarship is awarded to a particular branch.
 - iii. The above procedure will be repeated with the remaining scholarships and the remaining candidates till all the scholarships (or candidates) are exhausted.
- 2. In case the number of total eligible candidates in a specific category is less than the number of scholarships in that category, the excess scholarships would be transferred to the other categories. All such scholarships transferred from a category would be awarded to eligible candidates from all other categories clubbed together as per the criterion i., ii., iii, of 1 above

In addition, the Chairman Senate shall be fully authorized/empowered to financially help a student on compassionate grounds in case of an emergency.

- (iv) In addition to the scholarships given by PEC University of Technology, mentioned at (i), (ii) and (iii) above, many other scholarships offered by various other Govt. and non Govt. organizations are also offered to the students, as and when applicable. A few scholarships under this category are:
 - 1. Bharti Scholarships
 - 2. Central Sector Scholarships for SC/ST students.
 - 3. Post Matric Scholarships for SC/ST students.

Note: The students who are granted free-ship in either of the categories above cannot avail reimbursement of tuition fee in the form of any other scholarship. They have to give an affidavit that they are not availing any other scholarship from anywhere which reimburses full or part of the tuition fee.

(v) Medals

- 1. Nine gold plated medals are awarded to the nine students who stand first in the institute among all candidates, appearing in the B.E. Final Examination of Aeronautical, Civil, Computer Science and Engineering, Electrical, Electronics and Electrical Communication, Information Technology Mechanical, Metallurgical and Production Engineering respectively.
- 2. Nine silver plated medals are awarded to the nine students who stand first in major project / project II in the 8th semester Examination of Aeronautical, Civil, Computer Science and Engineering, Electrical, Electronics and Electrical Communication, Information Technology Mechanical, Metallurgical and Production Engineering respectively.

- 3. Administrator's Gold Medal is awarded to a BE graduate at the time of annual convocation on the basis of his / her overall outstanding performance in the activities like academic, sports and games, cultural, technical, NCC / NSS etc.
- 4. Advisor's Gold Medal for the best sportsperson is awarded to a BE graduate at the time of annual convocation on the basis of his/her over all outstanding performance in sports.
- 5. Kalpana Chawla Memorial award, instituted by the Chandigarh Administration in the memory of Dr. Kalpana Chawla, a distinguished alumnus of the Aeronautical Engineering Department of PEC, Chandigarh is given to the student standing first in the BE Aeronautical Engineering. It carries a Gold Medal, a certificate and a cash award of ₹25,000/-.
- 6. Aditya Miglani Memorial Gold Medal is instituted in the memory of Aditya Miglani, an exstudent of this institute of the Computer Science & Engineering Department. It is awarded to the student standing first in the BE Computer Science & Engineering.
- 7. Sheilly Sachdev Gold Medal for Social Activities is instituted in the memory of Smt. Sheilly Sachdev and is awarded to a BE graduate at the time of annual convocation on the basis of his/her overall performance in social activities.
- 8. Charu Puri Excellence Award: This award in the memory of Ms. Charu Puri, is awarded to a final year BE student of PEC for augmented excellence in club/cultural activities and academics. It carries a silver medal a certificate and a cash award of ₹5000/-.
- 9. Sarvnipun Chawla Memorial Award: This award is instituted in the memory of Sarv Nipun Chawla, an ex-student of this institute of the Production Engineering Department. It is awarded to the student having Best Project in Production Engineering. It consists of a cash prize of ₹5000/-

8.2 Postgraduate Programmes

8.2.1 M.E Programmes

- (a) The students (of each category) admitted to M.E. Degree Programmes on the basis of GATE result, may get scholarships @ ₹8000/- per month. Grant of Scholarship is subject to the availability of funds and the fulfillment of conditions for such award. The candidates admitted without having qualified GATE shall not be entitled to the above scholarship.
- (b) Every student must submit a formal application for grant of Scholarship in the prescribed form within a week from the date of actually joining the Postgraduate Classes duly attested by the concerned Head of the Department.
 - (i) An awardee under post-graduate scholarship scheme will not be allowed to receive additional scholarship or stipend or special allowance from any other source. In case he is in receipt of any such award, the same must be surrendered and the amount received as such should be refunded before the benefit of scholarship is availed of.
 - (ii) Good conduct, a minimum level of academic performance and regularity in attendance are also implied conditions for the continuance of the scholarship.
 - (iii) If any candidate is found to be ineligible for the award of the scholarship for any reasons whatsoever including wrong information given by the student concerned, the scholarship will be cancelled and the total amount paid to him will be recovered in lump-sum.

- (c) Unauthorized absence from the institute will result in forfeiture of scholarship in part or in whole for the period of absence or subsequent to such absence.
- (d) A student who has not appeared in the End Semester Examination due to shortage of attendance or otherwise will be debarred from future payment of scholarship till he clears the Semester Examination in which he has not appeared. No scholarship will be payable for the intervening period.
- (e) Unsatisfactory progress of a student during the course may result in discontinuation of scholarship.
- (f) In order to be eligible to receive the scholarship, the student is required to submit an undertaking on a non-judicial stamp paper that in case he does not fulfill the conditions as laid down by G.O.I. in their Letter No. F.3-16-88 (Part-II) 1.2, dated 7th April 1989 as modified from time to time, he will refund the entire amount of scholarship without protest. The conditions to be fulfilled in addition to the general conditions mentioned earlier are:
 - (i) He will undertake 8 to 10 hours per week of work related to teaching and research activities as assigned by the Head of Department of the Course. For this the Schedule of work may be prepared by the respective Head of the department/DPGC within a week from the admission / start of the semester.
 - (ii) He has to secure a CGPA of at least 6.5 during the first semester, second semester and third semester examinations passing all the subjects of that semester to become eligible for continuance of scholarship during the second, third and fourth semester respectively.
 - (iii) He will not leave the course midway or appear in any competitive examination not related to Engineering and Technology.

J. Important Information

- 1. Minimum of 80 percent of the attendance in each subject is necessary for being admitted to Endsemester examination in any subject. Besides the students must carry out and acquaint themselves with laboratory and practical work covered during the year, to the satisfaction of the Chairman Senate. Students are required to pursue their studies regularly and those whose performance in the class tests is not satisfactory are liable to be detained by the Chairman Senate from appearing in the University Examination.
- 2. Every student shall be offered theory/ practical papers for examination as per the scheme of examination approved by the Senate of PEC University of Technology, Chandigarh.

8.2.2 Ph.D Programmes

Full time GATE qualified Ph.D. students may be given scholarship subject to availability of funds.

9. STUDENTS FACILTIES

9.1 Hostels

There are four hostels for boys namely Shivalik, Kurukeshetra, Himalaya and Aravali and two hostels namely Kalpana Chawala and Vindhya for girls and Nilgiri Apartments for research scholars and families. Each hostel is self-contained with amenities such as reading –room, indoor games room, lounge and dining hall with a mess. The mess in Kurukeshetra, Himalaya and Vindhya hostels is run on cooperative basis while in Shivalik, Aravali and Kalpana Chawala, it is run on contract basis. The DSW is the Incharge of the Hostels Organization. He is assisted by CCW, Hostel Wardens and Deputy Wardens. The messing and hostel arrangements are under the supervision of the Hostel Executive Committee(HEC) comprising of Warden, Deputy Warden and students residing in the hostel. Students are required to conform to all Hostel/Mess Rules which may be enforced by DSW/CCW/HEC from time to time as approved by the Director/ Committee for management of hostel(CMM). The allotted Hostel accommodation may be cancelled during vacations as and when decided by the CMM/HEC.

Rules regarding Maintenance of Discipline in the Hostel

- 1. The residents are expected to live in the hostel as a community and with a full sense of responsibility.
- 2. The residents are not allowed to gamble in the hostel premises.
- 3. The residents are not allowed to bring intoxicants and take part in activities of intoxication in any form in the hostel premises.
- 4. The residents are not allowed to entertain or keep guests in their rooms, except with the prior written permission of the Hostel Warden.
- 5. The residents shall not commit any breach of peace in the hostel premises.
- 6. The residents shall not invite undesirable elements into the hostel premises.
- 7. The residents are not permitted to stay overnight out of their hostels, or go out of station without prior permission of the Hostel Warden.
- 8. The residents are not permitted to install and use any electrical appliance except a wall light, a table lamp and a table fan for their rooms. A breach of this rule will result in the forfeiture of the appliance and suitable disciplinary action.
- 9. Residents are not permitted to keep with them any offensive weapon, such as fire arms, Kirpan or Khukhri, etc. Strict action will be taken against anyone found in possession of such a weapon.
- 10. Residents are advised not to keep large amounts of cash in their rooms.
- 11. The residents are not allowed to keep costly items like T.V., Stereo decks etc. in their rooms.
- 12. All residents of the hostels & their parents will have to submit separate affidavits to the effect that the students will not be involved in the ragging activities in any way.
- 13. For any indiscipline in the hostels, a minimum of Rs. 500 & a max. of Rs. 5000 fine will be imposed. Beyond that, the matter will be referred to the Student Affair Committee.

9.2 Students Council

Students Executive Council is constituted each year to expeditiously deal with the problems of the students. Thirty four student members are derived from different constituencies. The constituencies have been so demarcated that the elected representatives from these constituencies can realistically represent the interest and problems of the students concerning all areas of their life, namely, Curricular, Extra Curricular, Cultural, Sports, Hostel and Mess etc.

9.3 Counselling Services

The office of the counseling services aims at helping students reach their highest academic and personal potential. This may involve helping with personal, learning and career concerns and promoting success and wellness among them. This office provides a confidential atmosphere in which students can explore any topic or situation and discuss any concerns they may have. The students are helped to work through their problems, to develop self awareness, and to over come problems.

The office of the student counseling services offers free and confidential counseling to students on individual or group basis. The services of a professional counselor for personal counseling are available to the students. The office also conducts workshops and presentations on a variety of psychological issues. In order to receive counseling, students may walk into the office of the DSW to schedule an appointment with the counselors. Students' referrals from peers, faculty or staff are also welcome.

The Counselling Cell has a Peer Help Group Comprising of nearly 25 students from all branches/year. The Peer Help Group members are basically volunteers, who are willing to spare 6-7 hours a week towards dedicated work for the Counselling Cell. Their main task is to identify the students who need to be counseled, refer them to the counselor, and monitor their improvement.

9.4 Sports Facilities

Keeping in view the importance of sports in today's scientific era and its vitality in the shaping of individual's personality and 'health and fitness', the institute lays considerable emphasis on students' participation in various games, sports and track and field activities. The spacious grounds of the Institute are laid out into playfields for Cricket, Hockey, Football, Handball, Volleyball, Lawn Tennis, Badminton etc. Facilities have also been provided for Yoga, Weightlifting, Wrestling and Kabaddi. A Gymnasium hall equipped with modern scientific machines like Multi- exerciser, a swimming Pool and two Squash Courts are available for the use of the students. The institute organizes rowing activity with the help of Chandigarh Sports Department and Chandigarh Rowing Association at rowing centre, Sukhna Lake. Hiking and Trekking activity is also undertaken by the students.

Lecturers in Physical Education and coaches are available for scientific teaching, training and coaching in various games and sports and physical fitness programme. The B.E. 1st year students have an option to take up "Physical Education" as an Audit Course.

9.5 National Cadet Corps (NCC)

The N.C.C. Infantry Unit has been started in the Institute from the year 1977 with a limited enrolment of 54 cadets. Students desirous of enrolment in Air wing or Naval Units can do so by enrolling themselves in such units in Chandigarh. Students have to adjust themselves to the timing and training programme of these units. Enrolment is made at the time of admission in the Institute.

In the beginning of an academic session, once a student is enrolled in any of the N.C.C. units in the Institute or outside, he will continue in the same unit upto completion of course and be exempted from the evening sports and games. He will have to undergo annual training camp and appear in the B and C Certificate examination of N.C.C. conducted by the Ministry of Defense. Duration of camp is normally 10-12 days. Various adventure courses and leadership training camps are also arranged. There is a reservation of vacancies for 'C' certificate holders while joining defense forces. Reservation of jobs in companies include Sahara and Reliance group.

Non – Indian and Indian students domiciled abroad are required to obtain permission of their respective Government and submit a "No Objection Certificate" before they can be enrolled for the N.C.C. Training.

BE 1st year students have an option to take up N.C.C. as an Audit Course.

9.6 National Service Scheme (NSS)

This institute is authorized for a National Service Scheme Unit comprising 300 volunteers. The unit enrolls volunteers who have the urge to do Social Service. Any student can enroll in this unit as an alternative to Sports and N.C.C. The students who have done previous N.S.S. work and otherwise satisfy the Institute N.S.S. would be given preference. The volunteers are to carry out the Training and Annual Camp as per programme.

BE 1st year students have an option to take up N.S.S. as an Audit Course.

9.7 Medical Facilities

The institute has a dispensary on campus to meet the first-aid and routine medical requirements of the students free of cost. In this dispensary, the consultation is also provided to the members of faculty/staff residing in campus. A senior medical officer along with other supporting staff, pharmacist, nursing orderly and ward boy attend to students and staff. In case of emergency patients are referred to GMSH-16 or PGI.

9.8 Students Clubs

Each hostel has a well furnished recreation and reading room where newspapers, magazines, television and radio are provided. In addition to the above, the students have their own activity clubs. The different clubs operational in the institute are:

- (i) Art and Photography Club
- (ii) Music Club
- (iii) Dramatics Club
- (iv) Speakers' Association and study circle (SAASC)
- (v) Projection & Design Club
- (vi) Energy Enviro-vision Club
- (vii) Entrepreneurship Developments Circle (EDC)
- (viii) Rotaract Club
- (ix) Communication Club

Students are required to conform to all Club rules which may be enforced from time to time by the Dean Students Welfare with the approval of the Director.

9.9 Technical Societies

In the institute the student Chapters of following Technical Societies are functional:

- (a) Indian Society for Technical Education (I.S.T.E.)
- (b) Institute of Engineers
- (c) The Institution of Electronics and Telecommunication Engineers (I.E.T.E.)
- (d) The Institution of Electrical and Electronics Engineers (I.E.E.E.)
- (e) Society of Automotive Engineers (S.A.E.)
- (f) Indian Institute of Metals (I.I.M.)
- (g) Aeronautical Society of India (A.e.S.I).
- (h) Society of Manufacturing Engineers (S.M.E.)
- (i) Aeromodelling Society of India
- (j) Solar Energy Society of India (SESI)

Students are encouraged to be members of these and other similar technical societies.

9.10 Publications: Magazine, Souvenir and Newsletter

The institute magazine, known as PECMAG, is published once a year. In this magazine, technical and literary articles contributed by students of the institute are included.

A souvenir containing photographs and personal memoranda of the final year students is also published every year. It contains brief comments which bring out the salient features of each student's personality. These publications are managed by an Editorial Board, comprising of students and members of the staff.

In addition to above two publications, Editorial board releases two newsletters by the students for the activities in the institute. One in English 'SPECTATOR' and other in Hindi named 'MANTHAN' in alternate semesters. The various activities, quizzes and events at PECFEST & TECHFEST are worth enumerating.

9.11 Shopping Centre

The shopping Centre of the Institute provides a general merchant shop, Stationary shops, Eateries, Hairdresser, Computerized Post Office and branches of State Bank of India and Punjab National Bank with ATM facilities.

9.12 Travel Concession

Travel Concession by Rail is admissible to the bonafide students of the institute to visit their Home Town during vacation and travel for training and paper reading etc.

ACADEMIC CALENDAR 2012 – 13

S. No.	Programme	From	То
	SEMESTER - 12131		
1	Registration BE, ME, 1 st Year Students BE 2 nd , 3 rd , 4 th year; ME 1 st & 2 nd Year Students All Ph.D. Students	Jul.30, 2012 (M) Jul.31, 2012 (Tu) Jul.31, 2012 (Tu)	
2	Teaching Session	Aug 01, 2012 (W)	Dec.04, 2012 (Tu)
3	Last date for Late Registration and Add and Drop of courses	Aug 13, 2012 (M)	
4	Reappear examination for old students (Marks system)	Aug 21, 2012 (Tu)	Sept.07, 2012 (F)
5	I Mid-term Exam	Sept. 04, 2012(Tu)	Sept 07, 2012 (F)
6	Last date for submission of documents	Sept.28, 2012 (F)	
7	Convocation 2012	Oct.13, 2012 (Sa)	
8	II Mid-term Exam	Oct.18, 2012 (Th)	Oct.23, 2012 (Tu)
9	Semester Break (for students only)	Oct.24, 2012 (W)	Oct.29, 2012 (M)
10	PECFEST, no classes	Nov 9, 2012 (F)	Nov 11, 2012 (Su)
11	Working day; no classes	Nov.12, 2012 (M)	
12	Last date for display of pre totals for students	Dec 04, 2012 (Tu)	
13	Last date for display of finalized pre totals	Dec 11, 2012 (Tu)	
14	End Semester Exam	Dec 10, 2012 (M)	Dec 18, 2012 (Tu)
15	Last date for showing evaluated answer-scripts	Dec 24, 2012 (M)	
16	Moderation committee meetings	Dec 26, 2012 (W)	
17	Last date for display, submission and verification of grades	Dec 28, 2012 (F)	
18	Publication of draft result gazette	Jan 8, 2013 (Tu)	
19	Winter break for students	Dec 19, 2012 (W)	Jan 09, 2013 (W)
20	Period for staff to avail vacation leave	Dec 19, 2012 (W)	Jan 07, 2013 (M)
21	Period for faculty to avail vacation leave after submission and verification of grades	Dec 28, 2012 (F)	Jan 07, 2013 (M)
22	Workshop Training (1st year)including the Saturdays on Dec. 22, 2012 and Dec. 29, 2012	Dec 19, 2012 (W)	Jan 04, 2013 (F)
22*	Winter break for students of 1 st year having Workshop Training	Jan 05, 2013 (Sa)	Jan 13, 2013 (Su)
23	Survey Camp (3rd year Civil)	Dec 24, 2012 (M)	Jan 04, 2013 (F)
23*	Last date for display, submission and verification of grades of Survey Camp (3rd year Civil)	Jan 8, 2013 (Tu)	
24	Industrial Tour (2nd year Students)	Dec 21, 2012 (F)	Dec 31, 2012 (M)

	SEMESTER - 12132					
25	Registration BE, ME, 1 st Year Students BE 2 nd , 3 rd , 4 th year; ME 2 nd Year Students All Ph.D. Students	Jan.10, 2013 (Th) Jan.11, 2013 (F) Jan.11, 2013 (F)				
26	Teaching Session	Jan 14, 2013 (M)	May 10, 2013 (F)			
27	Re-examination for BE 1st yr 'E' grade holders	Jan17, 2013 (Th)	Jan 18, 2013 (F)			
28	Last date for Late Registration, Add and Drop of courses	Jan 25, 2013 (F)				
29	I Mid-term Exam	Feb 18, 2013 (M)	Feb 21, 2013 (Th)			
30	Sports Meet; no classes	Mar 07, 2013 (Th)	Mar 09, 2013(Sa)			
31	Reappear exams for old students (Marks system)	Mar 04, 2013(M)	Mar 22, 2013 (F)			
32	TECHFEST; no classes	Mar 22, 2013 (F)	Mar 24,2013(Su)			
33	Working day; no classes	Mar 25, 2013(M)				
34	II Mid-term Exam	Apr 02, 2013(Tu)	Apr 05, 2013 (F)			
35	Last date for display of pre totals for students	May 10, 2013 (F)				
36	Last date for display of finalized pre totals	May 17, 2013 (F)				
37	End Semester Exam	May 15, 2013 (W)	May 22, 2013(W)			
38	Last date for showing evaluated answer-scripts	May 27, 2013 (M)				
39	Moderation committee meetings	May 29, 2013 (W)				
40	Last date for display, submission and verification of grades	May 31, 2013 (F)				
41	Publication of draft result gazette	Jun 14, 2013 (F)				
42	Summer break for students	May 23, 2013 (Th)	July 26, 2013 (F)			
43	Period for staff to avail vacation leave	May 23, 2013 (Th)	July 24, 2013 (W)			
44	Period for faculty to avail vacation leave after submission and verification of grades	May 31, 2013 (F)	July 23, 2013 (Tu)			
45	Workshop Training (1st year)	May 23, 2013(Th)	Jun 19, 2013(W)			
46	Registration for Summer Term	May 27, 2013(M)	May 30, 2013(Th)			
47	Summer Term	May 30, 2013(Th)	July 24, 2013 (W)			
48	Evaluation of 6 th semester training	July 24, 2013(W)	July 29, 2013(M)			
49	Last date for display and submission of 6 th semester training grades	July 29, 2013 (M)				
50	Commencement of the session 2013-14	July 29, 2013 (M)				

Note:

- As there are 14 working Mondays,14 Tuesdays, 14 Wednesdays, 15 Thursdays and 13 Fridays during the semester 12131, the timetable of Friday shall be observed on Nov 8, 2012 (Th).
 The students of 1st year having Workshop Training during Dec 19, 2012 to Jan 04, 2013 shall be allowed to register on Jan
- 04, 2013 before proceeding on vacation.
- 3. The rationalization of teaching days for the semester 12132 shall be done after the list of holidays for the year 2013 is published.

LIST OF HOLIDAYS FOR THE CALENDAR YEAR 2012

(in addition to all Saturdays and Sundays)

S.No.	Name of holiday	Date	Day
1	Birthday of Sri Guru Gobind Singh ji	05.01.2012	Thursday
2	Republic Day	26.01.2012	Thursday
3	Birthday of Guru Ravidas ji	07.02.2012	Tuesday
4	Maha Shivratri	20.02.2012	Monday
5	Holi	08.03.2012	Thursday
6	Mahavir Jayanti	05.04.2012	Thursday
7	Good Friday	06.04.2012	Friday
8	Vaisakhi	13.04.2012	Friday
9	Janamashtami	10.08.2012	Friday
10	Independence Day	15.08.2012	Wednesday
11	Id-ul-Fitr	20.08.2012	Monday
12	Mahatma Gandhi's Birthday	02.10.2012	Tuesday
13	Dussehra	24.10.2012	Wednesday
14	Maharishi Balmiki's Birthday	29.10.2012	Monday
15	Diwali	13.11.2012	Tuesday
16	Guru Nanak Dev's Birthday	28.11.2012	Wednesday
17.	Christmas Day	25.12.2012	Tuesday

Rules & Procedures for Undergraduate Programmes (Applicable to students admitted from Academic Session 2010-11 onwards)

PEC University of Technology Chandigarh

1. INTRODUCTION

PEC University of Technology, Chandigarh is a premier institution in Northern India. Annually, about 385 students are admitted in its undergraduate programmes. Admissions are made once a year in the month of July based on ranks of candidates in AIEEE (All India Engineering Entrance Examination), conducted by CBSE. The admission to a particular branch of study is decided by the Joint Admission Committee. The normal duration of B.E. programme is 8 semesters.

The objectives of the undergraduate programmes are:

- (i) To impart engineering education that prepares the students for immediate employment
- (ii) To develop design capability among students
- (iii) To develop breadth & depth of knowledge in students
- (iv) To develop communication skills, awareness & competence to use information technology, ability to design & perform experiments, ability to work with others, understanding of human, social & business spheres, global view of diversity of world & intellectual pursuits, and ability to recognize and appreciate ethical standards.

The Institute follows a specialized credit based semester system for its academic programmes. This system allows greater freedom to the individual to tailor the programmes to his/her specific needs. The students are required to follow certain regulations and procedures to meet the academic requirements of each semester.

1.1 Undergraduate Programmes

Bachelor of Engineering (B.E.) -4 year (8 semesters) programme in Aeronautical Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics & Electrical Communication, Information Technology, Mechanical Engineering, Materials & Metallurgical Engineering and Production Engineering.

1.2 Office of the Dean of Academic Affairs

The office of the Dean of Academic Affairs (DAA), called the Academic section, is responsible for the implementation of the decisions taken on academic matters by the Senate and SUGC. It (i) receives, processes and maintains all records relating to the undergraduate and post graduate programmes including curricula, courses offered, academic calendar, registration, leave, examinations, grades and award of degrees and prizes, (ii) disseminates information pertaining to all academic matters, (iii) issues necessary memoranda/orders, (iv) acts as a channel of communication between the students, instructors, departments and SUGC. It assists the SUGC and its subcommittees in their tasks.

1.3 Waiver Clause

The procedures and requirements set out in this manual, other than 3, 6,7, 8, 10 and 11 may be waived in special circumstances by SUGC. All exceptions are, however, reported to the Senate.

2. ADMISSIONS

- Admissions to the B.E. programmes are made once a year in July based on rank in **AIEEE**, conducted on an All India level by CBSE.
- The minimum academic qualification for admission is a pass in the final examination of 10+2 or its equivalent with at least 60% marks in aggregate (55% marks in case of S.C./S.T./Physically Challenged), conducted by a recognized Board/University/Council. The detailed procedure and other requirements for admission are specified in the Admission Brochure brought out every year.

- 50% of the seats are reserved for candidates who pass their qualifying examination as regular students of schools located in Chandigarh and recognized by the Chandigarh Administration
- Admission to any undergraduate programme requires that the applicant
 - i) be eligible,
 - ii) go through the laid-down admission procedure, and
 - iii) pay the prescribed fees.
- All admissions to the B.E. programmes should be formally approved by the SUGC or its subcommittee formed for the purpose.

2.1 Cancellation of Admission

All students admitted provisionally or otherwise to any programme are required to submit their marks-sheets, provisional certificates, etc. of the qualifying examination and other documents at the time of counselling for admissions. The Senate can cancel the admission of any student who fails to submit the prescribed documents or to meet other stipulated requirement(s). The Senate may also cancel the admission at any stage during the course, if it is found that the student had supplied some false information or suppressed relevant information while seeking admission.

2.2 Change of Branch

The students shall normally pursue the respective B.E. programmes allocated to them at the time of admission. However, the senate may permit a limited number of academically meritorious students, as assessed by their performance in the Institute at the end of first year, to change their branch as per approved guidelines given below:

2.2.1 Guidelines for Change of Branch

A student may be allowed change of branch on the basis of his/her academic performance at the end of second semester provided that:

- (i) Such change will be considered only once at the end of the second semester. All such transfers can be effected only once at the beginning of the second academic year of a student. No application for the change of branch will be entertained during the subsequent academic years.
- (ii) Only those students will be eligible for consideration for the change of branch who were admitted against normal seats (supernumerary seats and the seats for NRI category students excluded) and have successfully completed the first two semesters with CGPA > 9.00.
- (iii) The application for the change of branch has to be submitted in the prescribed proforma, in the office of Dean Academic Affairs at the end of second semester by the date announced for this purpose. The application must clearly specify the branches to which change is sought, in order of preference. The preference given once cannot be changed at a later stage.
- (iv) Merit list of the eligible applicants shall be prepared on the basis of their CGPA of the first two semesters.
- (v) In case of a tie in CGPA, the student who had a better AIEEE rank (on the basis of which admission to BE programme was granted) would be placed higher in merit.
- (vi) The allotment of new branch would be made in order of merit and in accordance with the order of preference specified by the student, subject to the availability of seat with the following constraints:

The inflow of students into a branch cannot increase the strength of a class beyond the normal sanctioned intake (excluding the students admitted against supernumerary and NRI seats), while the outflow of students from a branch cannot decrease its existing strength by more than 10 percent.

4. ACADEMIC SESSION

The academic session normally begins in the fourth week of July every year and ends in the middle of July. It is divided into three parts:

First Semester: Normally from the fourth week of July to the last week of November **Second Semester**: Normally from the second week of January to the third week of May

Summer Term: Normally from the last week of May to the middle of July.

Each of the two semesters is of 16 weeks which includes about 15 weeks of teaching, one week being utilized for the two mid-semester examinations. The summer term consists of about eight 8 working weeks, four days being taken up by the two mid-term and one end-term examinations.

3.1 Academic Calendar

The exact dates of all the important events, such as registration, late registration, commencement of classes, examinations, vacation etc., are specified in the *Academic Calendar* of the Institute to be approved by the Senate.

5. CURRICULUM

Every B.E. programme has a curriculum and syllabi for the courses approved by the Senate. Details of the curriculum for the undergraduate programmes are contained in the "Courses of Study" bulletin, published periodically by the Institute.

4.1 Structure of the B.E. Programme

The B.E. programmes consist of courses in Sciences, Mathematics, Humanities & Social Sciences, Engineering and Technology, and other related topics. The programme of instruction will consist of:

- (i) Courses in Science, Mathematics, Humanities & Social Sciences, Technical Arts.
- (ii) Engineering core courses introducing the student to the foundations of engineering.
- (iii) Discipline core courses for the breadth requirement in the chosen discipline of studies of a student.
- (iv) Discipline elective courses enabling a student to take up a group of courses pertaining to the chosen discipline of studies of a student.
- (v) Open elective courses enabling a student to take up courses of interest from all the courses available in the Institute.
- (vi) B.E. capstone project in which a student studies the problems of integrated design and which integrates the learning in all the courses that a student undertakes in the institute.

In the engineering courses, the students are exposed to principles of design, which develops in them the ability for physical and analytical modeling, design & development.

4.2 Credit System

Credit Assignment

Each course, except a few special courses, has a certain number of credits assigned to it depending upon its lecture, tutorial and laboratory contact hours in a week.

Lectures: one lecture hour per week per semester is assigned one credit

Tutorials/Laboratory: One tutorial/laboratory hour per week per semester is assigned half a credit.

In evaluating the total credits assigned to a course, any fraction is rounded off to the next higher digit. A few courses are without credit and are referred to as non-credit (NC)/Audit courses.

5. REGISTRATION

All students are required to register each semester for the courses to be pursued by them, as per the programme, on the dates specified in the Academic Calendar. A student must ensure that he/she has completed the pre-requisites, if any, for each course to be registered.

The sole responsibility for registration rests with the student concerned.

5.1 Registration Procedure

A list of courses to be offered during the semester is put up on the notice boards and is made available to the HoDs and Programme Counsellors.

The SUGC nominates Programme Counsellors from amongst the faculty to provide necessary information on the core courses offered and changes, if any, during registration in each semester. Similarly, the DUGC nominates Programme Counsellors to advise students on Registration for the courses of the professional curriculum.

The registration procedure involves:

- a) filling of the registration form mentioning the courses to be credited in the semester/summer term,
- b) payment of fees and clearance of all outstanding dues (if any), and
- c) signing of the registration roll in the office of the Dean, Academic Affairs.

A student will not get credit for any course for which he/she is not registered in any academic term.

5.2 Registration of a Deficient Student

A deficient student is one who has either not taken or has taken but failed in course(s) of previous semester(s). The deficiency may be due to poor grades, not registering course(s) for health and /or other reason(s), etc.

The programme of a deficient student must be framed by DUGC in such a manner that as many backlog courses as are available are included. Further, backlog courses must be arranged as far as possible in the sequence of their accumulation.

The registration of the deficient students is done as per the recommendations of the respective DUGC.

5.3 Late Registration

If for any compelling reason like illness etc. a student is unable to register by the date of normal registration, he/she can register by the late registration date (i.e., after about two weeks from the beginning of the semester) specified in academic calendar on payment of a late fee. However, if a student seeks prior permission to register late on valid grounds, he /she may be allowed to do so without payment of late registration fee by Chairperson, SUGC.

No student shall be allowed registration after the last date specified for registration.

5.4 Adding and Dropping of Courses

A student may add or drop course(s) within two weeks of the beginning of the semester or the last date(s) specified in the Academic Calendar with the permission of the SUGC.

For this, he/she must fill up the appropriate form, get the endorsement of the Instructors—in- Charge and the Convenor, DUGC and submit the form to the Academic Section for approval.

A student may be required to drop a course at any stage if it is found that he/she does not meet the prerequisites of the course, or if there is a clash in the student's time table preventing him/her from attending the course, or if he/she is found not entitled to register for that course for any other reason.

5.5 Academic Load

A student is normally expected to register for six courses every semester as per the respective programme. Each course carries a weightage in terms of credits depending upon the academic load which, in turn, is determined by the number of contact hours (lectures and tutorials) and laboratory hours (if applicable).

A student may, however, be permitted by SUGC to take up an overload of one course to enrich his/her knowledge or clear backlogs as per the approved guidelines.

Similarly, SUGC may allow a student, for bonafide reasons, to take a reduced load. Also, a deficient student may be required to take up a reduced load as per the provisions/ recommendations of SUGC/decisions of the Senate.

5.6 Summer Term Registration

The Summer Term is essentially for removal of backlogs of deficient students. A list of courses to be offered in the Summer Term is brought out during the second semester, normally before March 15 every year. Students register for these courses at the beginning of the Summer Term on the advice of the SUGC or DUGC.

Guidelines for Summer-Term are contained in Annexure – IV.

5.7 Cancellation of Registration

Absence for a period of four or more weeks at a stretch during a semester/summer term shall result in automatic cancellation of the registration of a student from all the courses in that semester/summer term.

6. TEACHING AND EVALUATION

6.1 Teaching

a) Medium - The medium of instruction and evaluation is English.

- **b) Approval of Courses -** Each course along with its weightage in terms of credits is approved by the Senate Standing Committee as per the procedures laid down by the Senate. Only approved courses may be offered during any semester/ summer term.
- c) List of Courses -The list of courses to be offered by a department is finalized before the beginning of the semester/ summer term by the concerned Head, taking into consideration all the requirements and the recommendations of the standing committee of the Senate. The list of all courses offered by the Institute in an academic term will be made available to the students before the date of registration for that term.
- d) Conduct of Courses- Each course is conducted by the Instructor-in-charge, assigned by the Head of Department, with the assistance of the required number of tutors and other instructors. The Instructor-in-charge is responsible for conducting the course, making the question paper, holding the examinations in his/her course, getting the answer scripts evaluated by the team of tutors and other instructors, awarding grades at the end of the semester/summer term and transmitting the grades to the Academic Section through the Head of the Department within the prescribed time limit.
- e) **Teaching Assignments -** The Instructors-in-Charge, instructors and tutors for all the courses offered by a department during the semester / summer term are designated by the concerned Head. If any other department is also required to participate in teaching a particular course, the respective Head designates the instructor and /or tutor.
- **f)** A teacher is expected to follow the approved curriculum. However, he/she can deviate from it in case it is felt that such deviation will improve the academic purpose of the course. In no case, this will be treated as a ground for complaint by the students.

6.2 Evaluation

The evaluation of the students is a continuous process and is based on their performance in mid-semester examinations, end semester examination, quizzes/short tests, tutorials, assignments, laboratory work (if any), make-up examinations (if applicable), etc.

In general, there shall be no choice in test/examination papers.

The Instructor-in-charge, assisted by the team of tutors and other instructors, is responsible for making the question paper, conducting the examination in his/her course, getting the answer scripts evaluated by the team of tutors, and awarding the grades. The grades are forwarded through the Head of the Department who will ensure that proper standards have been used.

The complete transparency will be maintained in evaluation system. The graded scripts of quizzes, tests, and mid-semester examinations will be returned to the students within a reasonable time. The answer scripts of the final examinations will be shown to the students after marking. All instructors will notify a time for such access within three days of the examination. A student may point out errors or omissions, if any, in marking in writing on the cover sheet of the answer script. The instructor will take these into account before submission of grades.

The final grades earned by all students registered in a course will be submitted by the Instructor-incharge to the Academic Section through the Head of the Department within the prescribed limit.

a) Schedule of Examinations -

The end-semester examination and the mid-semester examinations will be held within the periods allocated in the Academic Calendar. In exceptional circumstances, the Dean, Academic Affairs may permit holding the examinations outside these periods.

b) Make-up Examinations –

If a student, for bonafide reasons such as illness, etc., fails to appear in the end-semester examination in one or more course(s), he/ she may make a request personally or through someone to SUGC for a make-up examination within two days of the date of the scheduled examination. Such a request must clearly specify the reasons for failure to appear in the end-semester examination with a certificate from a Government Hospital/Institute Dispensary, in case the failure was due to illness. In case, Govt. hospital/dispensary or institute dispensary is not in the vicinity of the student, the institute shall depute a doctor for medical examination of the student at the cost of student.

Only one make-up examination, for the end-semester examination, is allowed per course. For failures to appear in mid-semester examinations, etc., it is entirely up to the Instructor-in-charge to ascertain the proficiency of the student by whatever means he/she considers appropriate if he/she is satisfied of the student's bonafides.

6.3 Grading System

The performance of the student in a course is reported in terms of broadband grades. The following letter grades are used:

Letter Grade	Performance	Grade Points
A	Excellent	10
В	Very Good	8
C	Satisfactory	6
D	Marginal	4
E	Deficient, reappear	0
F	Failing	0
I	Incomplete	0
N	Not Eligible	
S	Satisfactory (for zero credit courses only)	-
X	Unsatisfactory (for zero credit courses only)	-

The grade E may be awarded to a student only if the student's performance is within 5% of the cut-off performance for the last passing grade D.

The E grade will be available to the students in only the first and second semester courses. The reappear examination will be scheduled by the Academic Section.

A student's overall academic performance within a given semester or in all the courses completed is measured by two grade point averages.

Semester Grade Point Average (SGPA): The performance of a student in a particular semester is measured by Semester Performance Index (SGPA), which is a weighted average of the grades secured in all the courses taken in a semester and scaled to a maximum 10.

If the grade points associated with the letter grades awarded to a student are g_1 , g_2 , g_3 , g_4 , and g_5 in five courses and the corresponding credits are w_1 , w_2 , w_3 , w_4 , and w_5 , the SGPA is given by

$$SGPA = \frac{w_1g_1 + w_2g_2 + w_3g_3 + w_4g_4 + w_5g_5}{w_1 + w_2 + w_3 + w_4 + w_5}$$

For instance, suppose a student is registered for one 5-credit course, four 4-credit courses, and one 3-credit course during a semester, i.e. a total of 24 credits. If he secures A, B, A, B, C, and D grades, respectively in these courses, his SGPA will be calculated as follows:

$$SGPA = (5x10 + 4x8 + 4x10 + 4x8 + 4x6 + 3x4)/24 = 190/24 = 7.92$$

Cumulative Grade Point Average (CGPA) - The Cumulative Performance Index (CGPA) indicates the overall academic performance of a student in all the courses registered up to and including the latest completed semester/summer term. It is computed in the same manner as the SGPA, considering all the courses (say, n), and is given by

$$CGPA = \frac{\sum_{i=1}^{n} w_i g_i}{\sum_{i=1}^{n} w_i}$$

The grades of any and all repeated courses are included in the official transcripts. However, once a student repeats and passes a course in which he/she had failed earlier, the earlier fail grade will not enter in to the computation of CGPA. Incomplete grades are not included in computing the GPA until an appropriate letter grade is assigned.

The Institute follows a continuous evaluation system with considerable freedom being given to the course Instructor in deciding the pattern of evaluation and weightages. However, a typical theory course will have two mid-semester examinations carrying weight of around 30 percent, one or two quizzes or short tests carrying 20-30 percent and an end-semester examination carrying a weight of 40-50 percent. The total marks thus obtained are converted to a letter grade. The conversion to letter grades may or may not be based on the relative performance of the students. The grades are on a scale of 10 with the grade A being the best and E and F being fail grades. Each letter grade has certain grade points associated with it, as given in the above Table. The grade E will represent a marginal failing grade with performance within 5% of minimum passing grade D. A student getting an E grade may be allowed a reappear in a repeat examination (allowed only once) to replace the performance in the regular end semester examination. Further, this grade will be available only to the students of 1st and 2nd semesters and will not be available to the students in the summer term.

Incomplete Grade 'I': For reasons acceptable to the Instructor, an I (for Incomplete) grade may be assigned if a student fails to complete any of the required course work by the end of the semester. In all such cases, an *Incomplete Contract*, which is a formal agreement between the student and the instructor, is to be filed along with the grade report. An Incomplete Contract includes:

- The course work that remains to be completed.
- The date by which the specified work must be completed (no later than one month of the close of relevant semester).
- The final grade to be substituted for the I grade, if the specified work is not completed by the specified date.

The Incomplete Contract will be filled by the Instructor with the Academic Office when the Grade Sheet is submitted.

If the student completes the required work by the specified time, the instructor completes a grade change form indicating the final grade earned. The student should check with the instructor to ensure that a grade change form has been submitted.

If the student does not complete the required work by the specified time, the I grade is automatically replaced with the final grade specified by the Instructor on the Incomplete Contract. If a final grade is not specified, or if an Incomplete Contract is not filed, the I grade automatically reverts to an F grade after one month.

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Grade N: A student who fails to fulfill the attendance requirement (clause 10.1) for a particular course shall not be eligible to appear in the end semester examination in that course and shall be awarded the grade 'N' for that course. He/she shall have to repeat the entire course.

Project Grades – Project grades finalized as per approved procedure shall be submitted by the last date specified for the submission of grades. If a student wishes to petition against the grade assigned, he/she should approach the Head of the Department within a week of the beginning of the next regular academic term. The HOD will report his recommendations to the Chairman, Senate for the final decision. The Chairman, Senate may also look into such a case directly.

Grade Report - A copy of the Grade Report is issued to each student at the end of the semester and a copy of same is also mailed to parents/guardian. A duplicate copy, if needed, can be obtained on payment of the prescribed fee.

Withholding of Grades – The grades of a student may be withheld if he/she has not paid his/her dues, or if there is a case of indiscipline pending against him/her, or for any other reason.

7. HONOURS PROGRAMME

To provide sufficient challenge to the brighter students, an *Honours* programme will be offered. In this programme the students will be encouraged to overreach and undertake extra learning units, assignments, projects, etc., over and above what is prescribed for the regular course. A student will have to register for the course under the *Honours* programme at the beginning of the semester. Such courses will be identified with the letter *H* suffixed to the course number. The grade in the *Honours* course will depend upon the student's performance in the regular material prescribed for the course *as well as* in the extra material covered. For a student to *graduate with Honours*, she/he must earn *at least* 50 credits in courses with *H* as a suffix. The Institute Senate shall provide rules for administration of the *Honours* programme.

Registration of the Honours courses will be available to a student from the second academic semester. A student with CGPA of at least 8.0 is eligible to register for Honours courses. He/she has to earn at least 50 credits in Honours courses in order to get an Honours degree. An eligible student can opt to register for Honours courses at the time of registration. However, if he/she does not wish to continue in Honours courses, he/she may withdraw within six weeks of starting of classes. In passing that course with Honours, student has to obtain A or B grade in that course. If he/she gets lower grades, he/she automatically shifts to normal course (without Honours).

8. ACADEMIC PERFORMANCE

8.1 Minimum Level of Performance for Movement to Higher Semesters

- a) No restriction on movement of a student from odd to even semester in a year
- b) (i) Promotion to 3rd semester of the programme during his/her second academic session in the institute only if the student has a CGPA ≥ 5 **and** he/she does not have a backlog of more than two courses excluding non-credit courses (three courses excluding non-credit courses in the case of a student who had been on one semester leave during the first year)
 - (ii) Promotion to 3^{rd} semester of the programme after spending two years in the institute only if the student has completed all course work requirements (including non-credit courses) of the first two semesters with a CGPA ≥ 5 . For fulfilling this condition, a student during his/her second academic session in the institute will be allowed to register for the courses, of the first and second semesters in which he/she has F/N/X grades, and if required, repeat a couple of courses in which he/she has D grades, provided his/her programme has not been terminated at the end of first year as per provisions of section 8.4.
- c) Promotion to 5th semester of the programme only if the student has earned at least 70 credits at the end of fourth semester of his/her programme having moved earlier in accordance with the conditions

mentioned in 8.1 a), b) above. If a student had completed the course work of the first two semesters of his/her programme with CGPA ≥ 5.0 after spending only one year in the institute but failed to earn 70 credits at the end of his two years in the institute, then for fulfilling the condition for moving to the 5th semester, a student during his/her third academic session in the institute will be allowed to register for the courses of 3rd and 4th semesters in which he/she has an F/N/X grade.

d) Promotion to 7th semester of the programme only if the student has earned at least 100 credits at the end of sixth semester of his/her programme in the institute having moved earlier in accordance with the conditions mentioned in 8.1 a), b) and c) above

NOTE: The minimum credit requirements for moving to higher semesters and to continue in the programme (specified in this section and in section 8.4 below) have been fixed on the basis of existing curriculum and keeping in mind that some of the students are slow-learners and they should be facilitated, as far as possible, to complete the programme within the maximum permissible duration

8.2 Academic Probation / Warning

The academic performance of each student shall be reviewed at the end of each regular semester. A student who fails to secure an SGPA of at least 4.5 and/or fails to earn a minimum of 15 credits during any semester will be considered to be on academic probation and a letter of warning shall be issued to him/her with a copy of the same being sent to the student's parents / guardian. This letter will also remind the student / parents / guardians of the conditions under which the programme of the student may be terminated.

8.3 Reduced Academic Load

A student placed on Academic Probation / Warning may be permitted a reduced load during the next semester if he/she so desires. However, the courses for which he/she registers will be decided by the appropriate DUGC keeping in mind the required minimum level of performance as per section 8.1 and the termination conditions laid down in section 8.4. The parents / guardians of such a student will be kept informed of his/her progress.

8.4 Termination of the Programme

For the purpose of continuation / termination of the BE programme, the performance of a student after completion of every academic session (including summer term) will be considered.

A student's programme may be terminated by the Senate on *any of the following grounds* and he/she will have to leave the institute (without degree):

- a) If a student fails to earn at least 24 credits after spending one year in the institute (including summer term). However, a relaxation of five credits will be given to students belonging to SC / ST categories.
- b) If a student fails to complete all course work requirements (including non-credit courses) of the first two semesters of the programme with a CGPA ≥ 5.0 in a maximum period of two years spent in the institute (including summer terms)
- c) If a student fails to earn at least 70 credits pertaining to the first four semesters of his/her programme in a maximum period of three years spent in the institute (including summer terms)
- d) If a student fails to earn at least 100 credits at the end of sixth semester of his/her programme in the institute (including summer term)
- e) If a student fails to earn at least 132 credits at the end of eighth semester of his programme in the institute (including summer term) (*Also see the note below*)
- f) If a student fails to complete all the programme requirements with a minimum CGPA of 5.0 after spending six years (as per clause 10.2) in the institute (including summer terms).
- g) If a student is absent from the institute without authorized leave of absence for more than eight weeks in a semester

h) If a student involves himself/herself in violation of the code of conduct, ragging etc. and the appropriate committee of the Senate makes a recommendation that the student's programme be terminated

NOTE: A student who, at the end of eighth semester of his/her programme, has earned at least 132 credits but has not completed all the curriculum requirements with a minimum CGPA of 5.0 and has not spent six years in the institute, will be allowed to register for the courses of 3^{rd} to 8^{th} semesters in which he/she has an F/N/X grade, and if required, repeat a couple of courses of these semesters in which he/she has a D grade, in order to complete the course work requirement and to secure a CGPA \geq 5.0 within the maximum permissible duration of the programme.

8.5 Appeal against Termination

- a) A student, whose programme is terminated at any stage, can appeal once to the Chairman Senate within 15 days of the issue of termination letter. In this appeal the student must fully justify as to why he/she should be allowed to continue. The Senate, if convinced of the reasons, may allow the student to continue with his/her programme.
- b) In no case will a second appeal by the same student be entertained for this purpose, in case his/her first appeal is not upheld by the Senate.

9. LEAVE OF ABSENCE

Applications for leave of absence have to be addressed and submitted to the Convener DUGC Applied Sciences for 1st year UG students and Convener DUGC of respective discipline for 2nd to 4th year UG students. The medical certificate in case of illness, recommendation of faculty Incharge in case a student has represented the institute for the activities like Sports / NCC / NSS etc. must be enclosed with the application. Leave must be submitted usually prior to availing the leave, or in case of emergency, within a week's time from the first day of the leave. Such leaves are only for the purpose of recommendation for condonation in case of attendance shortage.

9.1 Temporary Withdrawal / Semester Leave

A student is not normally allowed to withdraw from the academic programme temporarily and is expected to complete his/her studies without any break. However, for bonafide reasons and/or in exceptional circumstances, a student may be allowed to withdraw temporarily on leave of absence at the discretion of Senate for an extended period. Such leave of absence(s) shall ordinarily not exceed two semesters with or without break during the entire period of the academic programme.

Authorized leave of absence for a period of four or more weeks at a stretch will result in automatic withdrawal from all courses in that semester/summer term.

A student who remains on authorized leave of absence due to ill health is required to submit a certificate from a Registered Medical Practitioner to the effect that he/she is sufficiently cured and is fit to resume his/her studies. The student will be allowed to register only when SUGC is fully satisfied of his/her state of health.

10. REQUIREMENTS

10.1 Attendance

As a rule, students are required to attend 80 % of all the scheduled lectures and labs, separately. A student who does not fulfill these minimum requirements in a course shall not be allowed to appear for the end semester examination and shall be required to repeat the whole course. The Chairman, Senate, on recommendation of Convener of concerned DUGC can condone a shortfall of upto 10% on medical grounds, participation in sports, attending conference/seminars and for assisting various Officer- incharge of the college for conduct of activities.

10.2 Minimum and Maximum Duration of the Programme

The minimum duration to complete the BE programme is 4 years (8 semesters) and the maximum permissible duration is 6 years (12 semesters) excluding semester leave, if any.

10.3 Academic

A student is required to complete successfully all the courses of the curriculum prescribed for his/her undergraduate programme and attain a minimum level of academic performance, i.e., obtain a minimum CGPA of 5.0

10.4 Additional Requirements

Departments may introduce additional specific requirements with the approval of the Senate during the professional curriculum.

10.5 Graduation

A student is deemed to have completed the requirements for graduation if he/she has

- a) met the attendance, residence and academic requirements given in Sections 10.1 to 10.3
- b) satisfied additional requirements, if any, of the concerned department
- c) paid all dues to the Institute and the Hostels, and
- d) no case of indiscipline is pending against him/her.

11. DEGREES

a) Award of Degrees

A student, who completes all the graduation requirements specified in Section 10.5, is recommended by the Senate to the Board of Governors (BOG) for the award of the appropriate degree in the ensuing convocation. The degree can be awarded only after the BOG accords its approval.

b) Withdrawal of the Degree

Under extremely exceptional circumstances, where gross violation of the graduation requirements is detected at a later stage, the Senate may recommend to the Board of Governors withdrawal of a degree already awarded.

12. CONDUCT AND DISCIPLINE

12.1 Code of Conduct

Each student shall conduct himself/herself in a manner befitting his/her association with a Institute of national importance. He/she is expected not to indulge in any activity, which is likely to bring down the prestige of the Institute. He/She should also show due respect and courtesy to the teachers, administrators, officers and employees of the Institute, and good neighbourly behaviour to fellow students. Due attention and courtesy is to be paid to visitors to the Institute and residents of the Campus.

Lack of courtesy and decorum, unbecoming conduct (both within and outside the Institute), willful damage and/or removal of Institute property or belongings of fellow students, disturbing others in their studies, adoption of unfair means during examinations, breach of rules and regulations of the Institute, noisy and unseemly behaviour and similar other undesirable activities shall constitute violation of the Code of Conduct for students.

Ragging in any form is strictly prohibited and is considered to be a serious offence. (See UGC regulations on curbing the menace of Ragging in Annexure VI).

12.2 Disciplinary Actions and Related Matters

Violation of the Code of Conduct shall invite disciplinary action which may include punishment such as reprimand, disciplinary probation, fine, debarring from examinations, withdrawal of scholarship and/or placement services, withholding of grades and/or degrees, cancellation of registration and even expulsion from the Institute.

Use of Unfair Means in examination will invite punishments as given in Annexure-IV

The Instructor/Tutor shall have the power to take appropriate action against a student who misbehaves in his/her class.

The Warden of a Hostel has the power to reprimand, impose fine or take any other suitable measure against a resident who violates either the Code of Conduct or Rules and Regulations pertaining to the concerned Hostel.

Involvement of a student in ragging may lead to his/her expulsion from the Institute.

The Senate Student Affairs Committee (SSAC) investigates alleged misdemeanours, complaints, etc. and recommends a suitable course of action. Violation of the Code of Conduct by an individual or of a group of students can be referred to this committee by a student, teacher or other functionary of the Institute. Further, in very exceptional circumstances, the Chairman, Senate may appoint a special committee to investigate and/or recommend appropriate action for any act of gross indiscipline involving an individual or a number of students, which, in his/her view, may tarnish the image of the Institute.

The recommendation for any action other than expulsion may be approved by the Chairman Senate. In case the recommended action is expulsion of a student from the Institute, the matter shall be referred to the Senate for its final decision.

A student who feels aggrieved with the punishment awarded may, however, appeal to the Chairman, Senate stating clearly the case and explaining his/her position, seeking reconsideration of the decision.

The Senate may not recommend a student, who is found guilty of some major offence, to the Board of Governors for the award of a degree/diploma/certificate even if he/she has satisfactorily completed all the academic requirements.

13. AMENDMENTS

Notwithstanding anything contained in this manual, the Senate of the PEC University of Technology, Chandigarh reserves the right to modify/amend without notice, the curricula, procedures, requirements, and rules pertaining to its undergraduate programmes.

Rules and Procedures for M.E. Programmes (Applicable from Academic Session 2010-11 onwards)

PEC University of Technology Chandigarh

1. INTRODUCTION

PEC University of Technology, Chandigarh, is a premier institution in Northern India. The broad objectives of the ME programmes are:

- (1) to develop the engineering /technical manpower of the highest quality to cater to the needs of industry, R&D organizations and educational institutions.
- (2) to develop advanced design capability among students.
- (3) to develop a deep understanding of the area of specialization in the students.
- (4) to develop innovative ability in the students to solve new problems, and a capacity to learn continually and interact with multidisciplinary groups.
- (5) to develop among students a capacity for free and objective enquiry, awareness and sensitivity to the needs and aspirations of the society.

With these objectives in view, the programmes are designed to have courses of study & thesis through which a student may develop his/her concepts and skills.

The admissions to the M.E. programmes are regulated through valid GATE (Graduate Aptitude Test in Engineering) scores. However, non-GATE candidates can also be considered after conducting test and/or interview. A few seats in each branch of engineering are available for part time and sponsored candidates also. The Senate will approve intakes in various branches.

The normal duration of ME programme is 2-years (4-semesters). The Institute follows a credit based semester system for its academic programmes. This system allows greater freedom to the individual to tailor the programme to his/her specific needs/aspirations.

This manual contains minimal regulations and procedures to be followed by the students to meet the academic requirements of the programmes. Within this general framework, subject to the approval of the Senate, the various departments and programmes may impose such additional requirements as will serve their particular academic objectives.

1.1 ME Programmes

The 2-year (4 semesters) M.E. programmes are available in following disciplines:

- 1. Civil Engineering (Highways)
- 2. Civil Engineering(Irrigation and Hydraulics)
- 3. Civil Engineering (Structures)
- 4. Civil Engineering (Environmental Engineering) An Inter disciplinary Programme
- 5. Computer Science & Engineering
- 6. Computer Science & Engineering (Information Security) A self-supporting Programme
- 7. Electrical Engineering
- 8. Electronics Engineering
- 9. Industrial Materials & Metallurgy
- 10. Mechanical Engineering
- 11. Production Engineering
- 12. Total Quality Engineering and Management-A self-supporting, Inter disciplinary Programme
- 13. Industrial Design A self-supporting, Inter disciplinary Programme

1.2 Office of the Dean of Academic Affairs

The office of the Dean of Academic Affairs (DAA), called the Academic Section, is responsible for the implementation of the decisions taken on academic matters by the Senate and SPGC. It

- (i) receives, processes and maintains all records relating to the undergraduate and post graduate programmes including curricula, courses offered, academic calendar, registration, leave, examinations, grades and award of degrees and prizes
- (ii) disseminates information pertaining to all academic matters
- (iii) issues necessary memoranda/orders
- (iv) acts as a channel of communication between the students, instructors, departments and SPGC. It assists the SPGC and its subcommittees in their tasks.

1.3 Waiver Clause

The procedures and requirements set out in this manual, other than those in sections 2, 7, 8.2, 8.3 and 8.5 may be waived in special circumstances by the Senate.

2. ADMISSIONS

- A candidate must have obtained a BE/B. Tech. or an equivalent degree with at least 60 percent marks
 or an equivalent CGPA with 5% relaxation for SC/ST and Physically Handicapped category
 candidates.
- In each programme 15 percent seats are reserved for the SC candidates and 7.5 percent seats are reserved for the ST candidates. The details of reservation of other categories & other information are supplied in Admission Brochure.
- The admission to ME programmes is regulated through valid GATE scores. However, non-GATE candidates can also be considered after conducting test and/or interview. The detailed procedure and other requirements for admission are specified in the Admission Brochure brought out every year.
- Sponsored and part-time candidates are also considered for admission to M.E. programmes. They need not have a valid GATE score. Their admission will be based on the performance in test and/or interview conducted by the concerned department.
- A sponsored candidate must have been in service of the sponsoring organization for at least two years at the time of admission. The sponsoring organization must specifically undertake to provide full salary to the candidate and to relieve him/her to pursue the programme for its full duration.
- The Institute offers part time M.E. programmes to local professionally employed personnel such as working engineers, scientists and teachers who can, while employed, attend regular classes as per schedule of the Institute. The applicant for part time programme must be an employee of a recognized organization with at least two years of service in that organization at the time of admission and be engaged in professional work in the area in which admission is sought. He/she will have to produce a 'No Objection Certificate' from his/her employer.
- Admission to any ME programme requires that the applicant
 - (i) be eligible
 - (ii) go through the laid down admission procedure, and
 - (iii) pay the prescribed fees.
- All admissions to the M.E. programmes should be formally approved by the Senate.

Cancellation of Admission

All students admitted provisionally or otherwise, to any programme are required to submit their marksheets, provisional certificates, etc. of the qualifying examination and other documents at the time of counselling for admissions. The Senate can cancel the admission of any student who fails to submit the prescribed documents or to meet other stipulated requirement(s). The Senate may also cancel the admission at any stage during the course, if it is found that the student had supplied some false information or suppressed relevant information while seeking admission.

3. SCHOLARSHIP

The students admitted to M.E. programmes may get scholarships on the basis of valid GATE scores. The said scholarship shall be in accordance with the set procedure and guidelines. The students will have to perform duties specified in the guidelines. The candidates admitted without having qualified GATE shall not be entitled to the above scholarship.

4.ACADEMIC SESSION

The academic session normally begins in the fourth week of July every year and ends in the middle of July. It is divided into two parts:

First Semester: Normally from the fourth week of July to the last week of November

Second Semester: Normally from the second week of January to the third week of May

Each of the two semesters is of 16 weeks duration.

4.1 Academic Calendar

The exact dates of all the important events, such as registration, late registration, commencement of classes, examinations, vacation etc., are specified in the *Academic Calendar* of the Institute to be approved by the Senate.

5. CURRICULUM

5.1 Structure of the ME Programmes

Every ME programme consists of courses in Mathematics, Research Methodology, departmental core courses and elective courses in the first and second semesters of the programme. The elective courses should be in the area which improves student's focus, preferably in the area of thesis work. The third and fourth semesters are meant for thesis work, in which a student woks on a chosen topic for investigation/study in consultation with the thesis supervisor. This culminates into submission of thesis report by the student. M.E. programmes in some disciplines may have courses in the third semester as well.

5.2 Credit System

5.2.1 Credit Assignment

Each course, except a few special courses, has a certain number of credits assigned to it depending upon its lecture, tutorial and laboratory contact hours in a week.

Lectures: one lecture hour per week per semester is assigned one credit

Tutorials/Laboratory: One tutorial/laboratory hour per week per semester is assigned half a credit In evaluating the total credits assigned to a course, any fraction is rounded off to the next higher digit.

5.2.2 Credit Requirements

Total minimum credits required for completion of ME degree = 64

Through course work = 32 credits (Minimum)

Through Thesis work= 24 credits (Minimum)

6. REGISTRATION

- 1. All students are required to register each semester for the courses/thesis work to be pursued by them, as per the programme, on the dates specified in the Academic Calendar. A student must ensure that he/she has completed the pre-requisites, if any, for each course to be registered.

 The sole responsibility for registration rests with the student concerned.
- 2. The DPGC nominates Programme Counsellors to advise students on selection of the courses of the concerned department. The student registering for the thesis must have a thesis supervisor assigned to him/her.
- 3. The registration procedure involves:
 - filling of the registration form mentioning the courses/thesis work, duly approved, to be credited in the semester
 - payment of fees and clearance of all outstanding dues (if any), and
 - signing of the registration roll in the office of the Dean, Academic Affairs.

A student will not get credit for any course/thesis work, for which he/she is not registered in any academic term.

- 4. All the students who are not on authorized leave must continue to register in the following semester till they submit their thesis. If, however, a student is likely to submit his/her thesis within two weeks from the commencement of the classes, he/she need not register in that semester. The period will not be extended in any case.
- 5. A new entrant (to the M.E. programme) who is awaiting the results of the qualifying examination will be allowed to register "provisionally" on submission of a certificate from his/her institution certifying that he/she has appeared in the final qualifying examination (including all papers in theory, practical, project, oral etc.). The candidate will submit attested copies as specified by the Academic Section.
- 6. In very special cases of students who have completed all the experimental work and analysis related to the thesis, and are on sanctioned leave, the SPGC on the specific recommendations of DPGC and HOD may allow submission of the thesis without registration.

6.1 Late Registration

- 1. If for any compelling reason like illness, etc. a student is unable to register by the date of normal registration, he/she can register by the late registration date, after about two weeks from the beginning of the semester, specified in Academic Calendar on payment of a late fee. However, if a student seeks prior permission to register late on valid grounds, he /she may be allowed to do so without payment of late registration fee by the Chairperson, SPGC.
- 2. In exceptional cases, the SPGC on the recommendation of the DPGC and HOD may consider the registration beyond the date of late registration. In such cases, the student will be allowed to register for the thesis only.

6.2 Semester Load Requirements

- 1. A semester load is defined as equivalent of 16 credits. Most courses, except a few, carry 4 credits. Thus, a student who has registered for a full semester load solely by theory courses is expected to attend 4 such courses, each of four hours a week. For a well-merited case, the SPGC may permit a student to register for a maximum of 20 credits or a minimum of 12 credits. In case of registration of the thesis, in a full semester, it will be equivalent to four theory courses.
- 2. A part time student will register for a minimum of 8 credits in a semester.

6.3 Adding and Dropping of Courses

- 1. A student may add or drop course(s) within two weeks of the beginning of the semester or by the last date(s) specified in the Academic Calendar with the permission of the SPGC.
- 2. For this, he/she must fill up the appropriate form, get the endorsement of the Instructor and the Convenor, DPGC and submit the form to the Academic Section for approval.
- 3. A student may be required to drop a course at any stage if it is found that he/she does not meet the pre-requisites of the course, or if there is a clash in the student's time table preventing him/her from attending the course, or if he/she is found not entitled to register for that course for any other reason.
- 4. The HOD in consultation with the instructor and with the approval of SPGC may allow a student at his/her request to withdraw from one or more courses during the semester, if he/she has been sick for considerable time and has submitted a certificate to the satisfaction of the HOD, but the reduced load shall not be less than the minimum semester load, as specified in section 6.2.

6.4 Change of registration from Part-Time to Full-Time

A student admitted to a part time programme may be allowed to change his/her registration to full time (regular) studies at the beginning of a semester upon the recommendation of the HOD and with the approval of the Chairman, Senate. For the purpose of determining the maximum period of stay, one half of the period spent as a part time student will be counted. The permission of the employer will be required for such change.

6.5 Change of registration from Full-Time to Part-Time

A student admitted to full time programme may be allowed to change to part time programme on completion of the course work upon the recommendation of the HOD and with the approval of the Chairman, Senate. His/her remaining period of the programme will be counted on the lines of part time candidates.

6.6 Cancellation of Registration

Absence for a period of four or more weeks at a stretch during a semester shall result in automatic cancellation of the registration of a student from all the courses in that semester.

7. TEACHING AND EVALUATION

7.1 Teaching

- a) Medium The medium of instruction and evaluation is English.
- **b) Approval of Courses -** Each course along with its weightage in terms of credits is approved by the Senate Standing Committee as per the procedure laid down by the Senate. Only approved courses may be offered during any semester.

- c) List of Courses -The list of courses to be offered by a department is finalized before the beginning of the semester by the concerned Head, taking into consideration all the requirements and the recommendations of the standing committee of the Senate. The list of all courses offered by the Institute in an academic term will be made available to the students before the date of registration for that term.
- d) Conduct of Courses- Each course is conducted by the Instructor, assigned by the Head of Department. The Instructor is responsible for conducting the course, making the question paper, holding the examinations in his/her course, getting the answer scripts evaluated, awarding grades at the end of the semester and transmitting the grades to the Academic Section through the HOD within the prescribed time limit.

A teacher is expected to follow the approved curriculum. However, he/she can deviate from it in case it is felt that such deviation will improve the academic purpose of the course. In no case will this be treated as a ground for complaint by the students.

7.2 Evaluation

The evaluation of the students is a continuous process and is based on their performance in midsemester examinations, end semester examination, quizzes/short tests, assignments, laboratory work (if any), make-up examinations (if applicable), etc. In general, there shall be no choice in test/examination papers. The Instructor is responsible for making the question paper, conducting the examination in his/her course, getting the answer scripts evaluated, and awarding the grades. The grades are forwarded through the Head of the Department who will ensure that proper standards have been used. Complete transparency will be maintained in evaluation system. The graded scripts of quizzes, tests, and midsemester examinations will be returned to the students within a reasonable time. The answer scripts of the final examinations will be shown to the students after marking. All instructors will notify a time for such access within three days of the examination. A student may point out errors or omissions, if any, in marking in writing on the cover sheet of the answer script. The instructor will take these into account before submission of grades. The final grades earned by all students registered in a course will be submitted by the Instructor to the Academic Section through the Head of the Department within the prescribed limit.

a) Schedule of Examinations

The end-semester examination and the mid-semester examinations will be held within the periods allocated in the Academic Calendar. In exceptional circumstances, the Dean, Academic Affairs may permit holding the examinations outside these periods.

d) Make-up Examination

If a student, for bonafide reasons such as illness, etc., fails to appear in the end-semester examination in one or more course(s), he/ she may make a request personally or through someone to SPGC for a make-up examination within two days of the date of the scheduled examination. Such a request must clearly specify the reasons for the failure to appear in the end-semester examination with a certificate from a Government Hospital/Institute Dispensary, in case the failure was due to illness. Only one make-up examination, for the end-semester examination, is allowed per course. For failures to appear in midsemester examinations, etc., it is entirely up to the Instructor to ascertain the proficiency of the student by whatever means he/she considers appropriate if he/she is satisfied of the student's bonafides.

7.3 Grading System

The performance of the student in a course is reported in terms of broadband grades. The following letter grades are used:

Letter Grade	Performance	Grade Points
A	Excellent	10
В	Very Good	8
C	Satisfactory	6
D	Marginal	4
F	Failing	0
I	Incomplete	0
S	Satisfactory (for zero credit courses only)	-
X	Unsatisfactory (for zero credit courses only)	-

A student's overall academic performance within a given semester or in all the courses completed is measured by two grade point averages.

Semester Grade Point Average (SGPA): The performance of a student in a particular semester is measured by Semester Performance Index (SGPA), which is a weighted average of the grades secured in all the courses taken in a semester and scaled to a maximum 10.

If the grade points associated with the letter grades awarded to a student are g_1 , g_2 , g_3 , g_4 , and g_5 in five courses and the corresponding credits are w_1 , w_2 , w_3 , w_4 , and w_5 , the SGPA is given by

$$SGPA = \frac{w_1g_1 + w_2g_2 + w_3g_3 + w_4g_4 + w_5g_5}{w_1 + w_2 + w_3 + w_4 + w_5}$$

For instance, suppose a student is registered for one 5-credit course, four 4-credit courses, and one 3-credit course during a semester, i.e. a total of 24 credits. If he secures A, B, A, B, C, and D grades, respectively in these courses, his SGPA will be calculated as follows:

$$SGPA = (5x10 + 4x8 + 4x10 + 4x8 + 4x6 + 3x4)/24 = 190/24 = 7.92$$

Cumulative Grade Point Average (CGPA) - The Cumulative Grade Point Average (CGPA) indicates the overall academic performance of a student in all the courses registered up to and including the latest completed semester/summer term. It is computed in the same manner as the SGPA, considering all the courses (say, n), and is given by

$$CGPA = \frac{\sum_{i=1}^{n} w_i g_i}{\sum_{i=1}^{n} w_i}$$

The grades of any and all repeated courses are included in the official transcripts. However, once a student repeats and passes a course in which he/she had failed earlier, the earlier fail grade will not enter in to the computation of CGPA. Incomplete grades are not included in computing the GPA until an appropriate letter grade is assigned.

The Institute follows a continuous evaluation system with considerable freedom being given to the course Instructor in deciding the pattern of evaluation and weightages. However, a typical theory course will have two mid-semester examinations carrying weight of around 30 percent; one or two quizzes or short tests carrying 20-30 percent and an end-semester examination carrying a weight of 40-50 percent. The total marks thus obtained are converted to a letter grade. The conversion to letter grades may or may not be based on the relative performance of the students. The grades are on a scale of 10 with the grade A being the best and F being fail grade. Each letter grade has certain grade points associated with it, as given in the above Table.

Incomplete Grade '1': For reasons acceptable to the Instructor, an I (for Incomplete) grade may be assigned if a student fails to complete any of the required course work by the end of the semester. In all such cases, an Incomplete Contract, which is a formal agreement between the student and the instructor, is to be filed along with the grade report. An Incomplete Contract includes:

- The course work that remains to be completed.
- The date by which the specified work must be completed (no later than one month of the close of relevant semester).
- The final grade to be substituted for the I grade, if the specified work is not completed by the specified date.

The Incomplete Contract will be filed by the Instructor with the Academic Office when the Grade Sheet is submitted. If the student completes the required work by the specified time, the instructor completes a grade change form indicating the final grade earned. The student should check with the instructor to ensure that a grade change form has been submitted. If the student does not complete the required work by the specified time, the I grade is automatically replaced with the final grade specified by the Instructor on the Incomplete Contract. If a final grade is not specified, or if an Incomplete Contract is not filed, the I grade automatically reverts to an F grade after one month.

Thesis Grades –The grade S or X will be awarded for thesis as per approved guidelines set by the Senate at the end of first and second semesters of second year. The thesis grades do not carry any grade points. The final grading of the thesis will be in terms of Very Good, Good, Pass or Unacceptable that will be awarded by Examining Committee at the time of thesis evaluation.

Thesis Evaluation

- 1. Every ME student shall have at least one but not more than two thesis supervisors from amongst the faculty members of the Institute. A thesis supervisor, with post graduate qualifications, from industry/research organization may be considered on recommendation by HOD & SPGC and approval by the Chairman, Senate but a co-supervisor should be from the Institute.
- 2. Every department shall prescribe a procedure for the appointment of the supervisors keeping in view the students aspirations and research interests of the faculty. Any change in supervisor will require the approval of the Senate.
- 3. In case the supervisor proceeds on long leave, resigns, superannuates or otherwise ceases to be a faculty member of the Institute before the submission of the thesis, a new supervisor will be appointed by the Senate on the recommendation of the department, if there is no other supervisor from within the Institute.
- 4. In case there has been a change/addition in the supervisor(s), the ME thesis will not be submitted earlier than three months after such change.
- 5. The ME thesis will be examined by a committee to be appointed by the Chairperson Senate, on the recommendation of the Supervisor and Head of the Department, following the guidelines set by the Senate. The examining committee will consist of four examiners: an external examiner,

thesis supervisor, an internal examiner from within the department, and an examiner from another department of the Institute.

6. Thesis Examination Committee will be appointed by the Chairman, Senate on the recommendation of the Supervisor and Head of the Department. Following procedure will be followed:

The Thesis Supervisor will suggest, in a proforma, a panel of three experts to act as external examiner, preferably from IITs and NITs, in the area in which the student has completed his thesis. Two internal & two examiners from the other departments (preferably from allied departments) of the College will be included in the panel of the examiners. The filled up proforma under the signature of Thesis Supervisor & the Head of the Department will be submitted to the office of Dean, Academic Affairs. E-mail addresses & contact numbers of the external examiners are to included in the addresses. Electronic version of the abstract (approx 250 words) should also be communicated simultaneously to Dean Academic Affairs. This will be put up to Chairman, Senate who will appoint the Thesis Examination Committee, tick-marking the names of examiners. The Thesis Examination Committee so constituted will be notified to all concerned.

- 7. After Thesis Examination Committee has been constituted, unbound copies of the thesis, one for each examiner of the Examination Committee have to be prepared. The thesis, at the earliest, can be submitted one month before the end of the term in which student is completing the minimum thesis credits. The Thesis Examination should be scheduled at least seven days after the submission of the thesis. Academic Office will arrange to send the copies of the thesis to the examiners.
- 8. The consent of the external examiner for his/her availability & date of examination will be obtained by the Dean, Academic Affairs and thesis will be dispatched by the Academic Office with intimation to all examiners, HOD & student.
- 9. The thesis examination will be conducted in the department & the thesis evaluation report, in a proforma available in the Academic Office, will be submitted by the thesis supervisor through the Head of the Department.
- 10. The candidate shall appear before the examining committee for oral examination and presentation on the scheduled date. The oral examination cannot be scheduled earlier than one week after the submission of the thesis. The examining committee shall award the final grade in terms of Very Good, Good, Pass or Unacceptable. Unacceptable thesis, after revision, will not be resubmitted till one month has elapsed.

Grade Report - A copy of the Grade Report is issued to each student at the end of the semester, and a copy of it is also mailed to parents/guardian. A duplicate copy, if needed, can be obtained on payment of the prescribed fee.

Withholding of Grades – The grades of a student may be withheld if he/she has not paid his/her dues, or if there is a case of indiscipline pending against him/her.

8. REQUIREMENTS

8.1 Attendance

As a general rule, a student will be required to attend 80% of all the scheduled lectures and labs, separately. A student who does not fulfil these minimum requirements in a course shall not be allowed to appear for the end-term examination and shall be required to repeat the whole course. The Chairman Senate, on sufficient reasons and on the recommendation of the concerned instructor may condone a shortfall of up to 10 percent.

8.2 Minimum Residence and Maximum Duration

For regular students, the minimum residence and maximum duration requirements for M.E. programmes are four (04) semesters and eight (08) semesters respectively. For the part time students, an additional year is added in minimum and maximum durations.

8.3 Academic

- 1. Minimum CGPA requirement for award of ME degree is 5.5
- 2. For moving to 2nd semester of the programme, a student must obtain a CGPA of at least 4.5 in the 1st semester.
- 3. No student (whether regular or part-time) is allowed to move to 3^{rd} semester of the programme until he/she completes the course work requirement of first two semesters with CGPA ≥ 5.5 . A student, who fails to do so in two years of time, has to discontinue his/her programme. For fulfilling this condition, a student, during his/her second academic session in the institute, will be allowed to register for the courses of first and second semesters in which he/she has an F/N/X grade, and if required, to repeat courses in which he/she has a D grade, in order to complete the course work requirement of first two semesters and to secure a CGPA ≥ 5.5 .

In case of ME programmes having course-work requirement in 3rd semester as well, a student (during his/her second academic session in the institute) will be allowed to register even for courses offered in 3rd semester of the programme to complete the CGPA requirement. Such a student will, however, be allowed to register for dissertation (thesis) work only after completing the CGPA requirement.

- 4. A student will not be allowed to continue the programme if he/she earns X Grades for his/her thesis work in two semesters.
- 5. The DPGC will keep a watch on the progress of every student and whenever a student fails to meet the requirements, will put up the case to Senate that may terminate the programme of the student. If a student's programme is terminated, the Dean Academic Affairs will issue the letter of termination.

8.4 Additional Requirements

Departments may introduce additional specific requirements with the approval of the Senate during the professional curriculum.

8.5 Graduation Requirements

A student shall be deemed to have completed the requirements for graduation if he/she has

- a) met the attendance, residence and academic requirements given in Sections 8.1 to 8.3
- b) satisfied additional requirements, if any, of the concerned department
- c) paid all dues to the Institute and the Hostels
- d) no case of indiscipline pending against him/her
- e) satisfied all the requirements specified by the Senate and Ordinances, and
- f) has submitted the thesis that has been found acceptable by the examining committee.

8. TERMINATION OF THE PROGRAMME

The M.E. programme of a student may be terminated by the Senate if he/she

- (a) is not meeting the academic requirements as given in Section 8, OR
- (b) is absent without authorized leave for more than four weeks in a semester, OR
- (c) involves himself/herself, in violation of the code of conduct, in ragging etc., and the appropriate committee of the Senate makes a recommendation to that effect, OR
- (d) fails to complete the programme within the maximum duration prescribed.

9.1. Appeal against Termination

A student whose programme is terminated on account of inadequate academic performance or otherwise, has the right to appeal to the Chairman Senate for reconsideration, within 15 days of the issue of the termination letter. While making the appeal against termination, he/she is expected to give reasons for his/her poor academic performance and/or to explain why his/her position merits reconsideration. The Senate shall take a final decision after considering all the available inputs. In no case shall a second appeal by the same student be entertained for this purpose, in case his/her first appeal is not upheld by the Senate.

10. DEGREES

(a) Award of Degrees

A student, who completes all the graduation requirements specified in Section 8.5, is recommended by the Senate to the Board of Governors (BOG) for the award of the appropriate degree in the ensuing convocation. The degree can be awarded only after the BOG accords its approval.

(b) Withdrawal of the Degree

Under extremely exceptional circumstances, where gross violation of the graduation requirements is detected at a later stage, the Senate may recommend to the Board of Governors for the withdrawal of a degree already awarded.

11. LEAVE RULES

- 1. Students who are absent from the institute continuously for two weeks without permission from the Head of Department, may not be permitted to continue in the semester and may be asked to drop the semester, unless satisfactory explanation of their absence, as given by them through the Head of Department, is duly accepted by the Chairman Senate.
- 2. If a student does not turn up after winter or summer vacations, his/her name will be sent to Chairman Senate for termination of the programme. If approved by the Senate, his/her name will be removed from the institute rolls with effect from the date on which he actually appeared in the last semester examination.
- 3. If a student does not appear in the end semester examination, then the concerned Head of Department will forward the name of the student for termination to the Chairman Senate
- 4. Students who are in receipt of the GATE scholarship shall be entitled to a total leave of 30 days in a year without loss of scholarship. They are not entitled for vacation.

11.1 Medical Leave

Leave on medical grounds, duly supported by a medical certificate, may be granted to a student up to eight days per semester. Unavailed leave may be carried over to the next semester up to a maximum of eight days. However, at a stretch, the medical leave shall not exceed 15 days. The medical certificate must be obtained from the Medical Officer of a Government Hospital or the Medical Officer of the Institute dispensary.

11.2 Semester Leave

Semester leave for up to a maximum of two semesters for the ME students may be sanctioned for bonafide reasons. Except for medical reasons, such leave would not normally be sanctioned before a student has completed his/her course requirements and in no case before the student has spent two semesters in the programme. However, on medical considerations such leave may be sanctioned after his/her stay of one semester. Leave for more than one semester at a time will not be granted.

12. PERMISSION TO PROCEED FOR ACADEMIC WORK OUTSIDE THE INSTITUTE

The M.E. students can be permitted to proceed for academic activities outside the Institute to carry out fieldwork, library work, computational work, experimental work, and lab work, and also to attend conferences, courses and to undertake other research work etc. as recommended by the HOD. Permission for a duration up to 15 days may sanctioned by Chairperson, SPGC on the recommendation of the HOD and more than 15 days by the Chairman, Senate on the recommendations of the HOD & Chairperson, SPGC.

13. CONDUCT AND DISCIPLINE

14.1 Code of Conduct

Each student shall conduct himself/herself in a manner befitting his/her association with an Institute of national importance. He/she is expected not to indulge in any activity, which is likely to bring down the prestige of the Institute. He/she should also show due respect and courtesy to the teachers, administrators, officers and employees of the Institute, and good neighbourly behaviour to fellow students. Due attention and courtesy is to be paid to visitors to the Institute and residents of the Campus.

Lack of courtesy and decorum, unbecoming conduct (both within and outside the Institute), wilful damage and/or removal of Institute property or belongings of fellow students, disturbing others in their studies, adoption of unfair means during examinations, breach of rules and regulations of the Institute, noisy and unseemly behaviour and similar other undesirable activities shall constitute violation of the Code of Conduct for students.

Ragging in any form is strictly prohibited and is considered to be a serious offence (See UGC regulations on curbing the menace of Ragging in Annexure VI).

13.2 Disciplinary Actions and Related Matters

Violation of the Code of Conduct shall invite disciplinary action which may include punishment such as reprimand, disciplinary probation, fine, debarring from examinations, withdrawal of scholarship and/or placement services, withholding of grades and/or degrees, cancellation of registration and even expulsion from the Institute.

Use of Unfair Means in examination will invite punishments as given in Annexure – V.

The Instructor/Tutor shall have the power to take appropriate action against a student who misbehaves in his/her class.

The Warden of a Hostel has the power to reprimand, impose fine or take any other suitable measure against a resident who violates either the Code of Conduct or Rules and Regulations pertaining to the concerned Hostel.

Involvement of a student in ragging may lead to his/her expulsion from the Institute.

The Senate Student Affairs Committee (SSAC) investigates alleged misdemeanours, complaints etc. and recommends a suitable course of action. Violation of the Code of Conduct by an individual or a group of students can be referred to this committee by a student, teacher or other functionary of the Institute. Further, in very exceptional circumstances, the Chairman, Senate may appoint a special committee to investigate and/or recommend appropriate action for any act of gross indiscipline involving an individual or a number of students, which, in his/her view, may tarnish the image of the Institute.

The recommendation for any action other than expulsion may be approved by the Chairman Senate. In case, the recommended action is expulsion of a student from the Institute, the matter shall be referred to the Senate for its final decision.

A student who feels aggrieved with the punishment awarded may, however, appeal to the Chairman, Senate stating clearly the case and explaining his/her position seeking reconsideration of the decision.

The Senate may not recommend a student, who is found guilty of some major offence, to the Board of Governors for the award of a degree/diploma/certificate even if he/she has satisfactorily completed all the academic requirements.

14. AMENDMENTS

Notwithstanding anything contained in this manual, the Senate of the PEC University of Technology, Chandigarh reserves the right to modify/amend without notice, the curricula, procedures, requirements, and rules pertaining to its M.E. programmes.

Annexure "III"

Rules and Procedures for Ph.D. Programmes (Applicable from academic session 2010-11 onwards)

PEC University of Technology Chandigarh

1. Objective of the PhD Programme

The PEC University of Technology has a mission to develop high quality scientific and engineering specialists having strong base of principles of science and the scientific methods, deep understanding of their chosen areas of specialization, the motivation to learn continually, interact with multi-disciplinary groups and to handle new challenges offered by the front-end technologies.

The PhD Programme is designed to impart knowledge, and consolidate concepts and intellectual skills through courses, seminars, projects, and thesis work. Above all, it helps the scholars to develop the capacity for free and objective enquiry, courage and integrity, awareness and sensitivity to the needs and aspirations of the society.

The Programme provides the candidates an enabling research experience during their stay in the Institute thus helping them to enter their professional life with right perspective and knowledge related to their respective fields of specialization.

2. Admission to PhD Programme

Admission to the PhD programmes is made on the basis of interview or written test or both as determined by PhD Admission Committee of the Department/Centre provided the candidate fulfils all the requirements at the Institute level and the selected candidate deposits the requisite fees for the PhD Programme. Applications are invited from candidates by advertising the programmes in leading Newspapers in the month of June for the first semester and in November for the second semester, every year.

Admission to PhD Programme is also possible any time during the year through Department / Centre Admission Committee with the approval of the Chairman Senate through Dean Academic Affairs for all categories of scholars although the course registration, where required, will be possible only at the beginning of next semester.

The PhD Admission Committee of a department / centre will consist of concerned RDC plus all potential PhD supervisors.

3. Categories of Scholars/Admissions

- Full-time Non-Sponsored with scholarship.
- Full-time Non-Sponsored without scholarship
- Full-time Sponsored.
- Part-Time.

Financial aid /Assistantship may be granted subject to availability of grants from PEC / UGC / DST/CSIR, etc.

4. Eligibility Criteria for Admission to PhD Programme

4.1 For Full-time Non-Sponsored Scholars:

Minimum Eligibility:

- Master's degree in Engineering/Technology or Master's degree in Science / Humanities / Management or equivalent in a relevant discipline with 55 % marks in aggregate for general category.
- 2. The candidate must have a valid Gate score or must have been admitted to the M.Tech. Programme with a valid Gate score. For admission to PhD Programmes in Science/Humanities/Management the candidates must have a NET Fellowship (UGC / CSIR) valid from the current year in relevant areas.

3. Provided that the condition for Gate / UGC NET will not be applicable to Full-time Non-Sponsored without scholarship category of candidates.

Selection basis: Interview will be held by Admission Committee of the Department. At the time of interview doctoral candidates are expected to discuss their research interest/area. If required, a written test may also be conducted by the Admission Committee of the concerned Department before the interview.

4.2 For Full-time Sponsored Scholars:

Minimum Eligibility: Master's degree in Engineering/Technology or Master's degree in Science/Humanities or equivalent in relevant discipline with 55% marks in aggregate for general category. These candidates must have served with the sponsoring organization for a minimum of 2 years on a full-time basis. The sponsoring organization needs to provide an undertaking as per Note 5.

Selection basis: Interview will be held by Admission Committee of the Department. At the time of interview doctoral candidates are expected to discuss their research interest/area. If required, a written test may also be conducted by the Admission Committee of the concerned Department before the interview.

4.3 For Part-Time Scholars:

Minimum Eligibility: Master's degree in Engineering/Technology or Master's degree in Science/Humanities or equivalent in relevant discipline with 55% marks in aggregate for general category. These candidates must have continued to serve the present organization for a minimum of 2 years. The candidate must provide a No-Objection Certificate from the employer as per Note 6.

Selection basis: Interview will be held by Admission Committee of the Department. At the time of interview doctoral candidates are expected to discuss their research interest/area. If required, a written test may also be conducted by the Admission Committee of the concerned Department before the interview.

NOTES:

- 1. The candidate may, if he/she so desires, give the choice of <u>possible</u> supervisors in his / her application for PhD Programme. <u>However, this would not be a limitation on allocation of supervisor(s).</u>
- 2. 15% seats are reserved for SC candidates and 7.5% seats are reserved for ST candidates.
- 3. For SC and ST candidates there will be a relaxation of 5% in the minimum aggregate marks *for admission* in all categories of scholars.
- 4. Seats as per Institute norms are reserved for the physically handicapped persons in all the PhD Programmes combined. The distribution of these seats will be coordinated centrally.
- 5. Sponsorship letter (on letterhead of the sponsoring organization) should include an undertaking stating that the period of study of the candidates will be treated as 'on duty' with usual salary/allowances, and he/she will be relieved for the period of studies.
- 6. Only employees of Government Departments or Research Development Organizations or Public Sector Undertakings or Registered Industries / Companies and also the faculty of an educational institution will be eligible for admission to PhD Programme as Part-Time Scholars. A candidate under this category has to produce a 'No Objection Letter' from his/her employer stating that (i) He / she is on the regular payroll of the organization, (ii) He/she is permitted to pursue studies on a part-time basis, and (iii) His/her official duties will permit sufficient time for research.

- 7. Full-time, non-sponsored candidates with scholarship coming on study leave must show proof of at least 3 years study leave before being allowed to register after the selection.
- 8. In case an eligible degree does not bear the awards in percent, the following Conversion Formula will be used to convert CGPA into percentage of marks for the purpose of admission at PEC:

Percentage of Marks = $[(CGPA - 0.5) / 10] \times 100$, on 10-Point Scale. For 4-point-scale following table may be used:

Percent Marks	GPA
55	2.10
60	2.30
65	2.50
70	2.70

- 9. The minimum prescribed percentage will be based on the marks obtained in aggregate of all the years/ semesters of the qualifying examinations as per the weightage followed by the concerned University.
- 10. The relevancy / equivalency of Master's degree for admission to a given discipline will be defined / determined by the concerned RDC.
- 11. There is no residency requirement for local PhD candidates (both full-time as well as part-time) who are residing within 50 km of PEC.
- 12. For the part-time PhD candidates, who are residing beyond 50 km of PEC, a residency requirement of one semester duration is mandatory in the first year of PhD Programme.
- 13. For full-time PhD candidates, who are residing beyond 50 km of PEC, a minimum residency of four continuous semesters from the beginning of the PhD Programme is mandatory.
- 14. The attendance of full-time PhD candidates will be governed by the attendance requirements of the Institute.
- 15. Part-time PhD candidates will be required to meet the supervisor at least eight times in a semester.
- 16. For admission to PhD Programmes in Science/Humanities/Management, if the candidate does not have a NET Fellowship (UGC / CSIR) valid for the current year in relevant areas, the candidates has to qualify a PhD Entrance Test of the institute.
- 17. Only the predetermined number of students may be admitted to a PhD programme.
- 18. As per the provisions 1(5) of the UGC Regulations 2009, PhD program will not be conducted through distance education mode.

5. Eligibility Criteria for PhD Supervisor

- i. Every registered scholar shall be assigned <u>one or more</u> research supervisor as approved by the RDC.
- ii. Any regular full-Time Faculty member of the concerned department holding a Doctorate degree having at least two years of service after doing PhD can be appointed a Supervisor.

iii. Depending on the problem, a scholar may be assigned two supervisors designated as Supervisor and Co-Supervisor. In no case the number of Co-Supervisors shall be more than one. The condition of two years of service after doing PhD in 5(ii) above will not be applicable to the Co-Supervisors.

6. Allocation of Supervisor

The allocation of the supervisor for a selected student shall be decided by the RDC of the department concerned in a formal manner depending on the number of students per faculty member, the available specialization among the faculty supervisors and the research interests of the student as indicated during interview by the student. The allotment/ allocation of supervisor shall not be left to the individual student or faculty. The RDC is to facilitate this process in the academic interest. At the end of the admission process, potential supervisors can express their interest to RDC in guiding a student and this will be taken on record. After joining, the student can meet the potential supervisor and may give his options for consideration by RDC. The RDC may take the final decision in a meeting where potential supervisors are present.

7. Ph.D. Course Work

After having been admitted, a PhD candidate shall be required to undertake course work for a minimum period of one semester. For this purpose, PhD scholar has to take at least a minimum number of two courses subject to the condition that a minimum of 6 total credits for the PhD Course Work will be mandatory. Further, one of the courses offered during the course work will be a course on research methodology, which may include quantitative methods and computer applications. It may also involve reviewing of published research in the relevant field. The other course will be based on the recommendations of the supervisor. The minimum requirement to pass the PhD Course work will be of CGPA of 6.5. The Course work may span over more than one semester subject to the other conditions in these rules as applicable.

The minimum qualifying requirement for allowing a student to proceed further with the writing of the dissertation will be as per those given in Para 8 and 9. If found necessary, course work may be carried out by doctoral candidates in sister departments / institutes either within or outside the university for which due credit will be given to them.

8. State-of-Art Seminar

As one of the essential requirements for the registration in the PhD Programme, a candidate must present his research proposal in a State-of-Art Seminar to the members of RDC to delineate the current state of knowledge through a suitable literature survey about the specific problem on which he/she wants to pursue research work. The methodology that he intends to use to conduct the research and the goals he intends to achieve on the completion of the research work should form an integral part of the proposal. A copy of the research proposal will be given to each member of the RDC of the department during the presentation. This will be an open seminar. The faculty and post graduate students of the department will invariably be invited to the State-of-Art seminar. The Viva Voce will form an essential component of the State-of-Art seminar.

This presentation can be scheduled at least one semester after admission of candidate to PhD Programme, but no later than 2 years after his/her admission. In case a candidate fails to complete this requirement within 2 years, his/her admission to PhD Programme will be cancelled. The supervisor will coordinate the State-of-Art Seminar.

On acceptable proposal and presentation in the State-of-Art Seminar, the RDC of the department will certify the fulfillment of the requirements for the registration of the candidate as per *Rule 9* and send its recommendation to DAA for registering the candidate. On receiving these recommendations, the DAA may register the candidate for PhD Programme, provided the candidate meets all the other requirements of the institute.

9. PhD Registration

A candidate may be registered for the PhD Programme provided he/she fulfills the following requirements:

- 1. The candidate must have completed the Course Work as per **Rule 7**.
- 2. A candidate has presented his/her research proposal in a State-of-Art seminar to the members of RDC to delineate the current state of knowledge through a suitable literature survey about the specific problem on which he/she wants to pursue research work. The RDC will certify that the proposal and the presentation were acceptable as a token of the fulfillment of this requirement.
- 3. A candidate will submit 10 copies of his/her accepted research proposal to the DAA duly signed by the supervisor and forwarded by Chairman RDC.

On receiving a report from the Chairman RDC certifying the fulfillment of the requirements for the registration of the candidate as per **Rule 9**, the DAA may register the candidate for PhD Programme provided the candidate meets all other requirements of the institute.

10. Monitoring Process

After the candidate is registered in PhD Programme, the progress of the research work will be continuously monitored through end-of-the-semester reports on a prescribed Proforma to be sent by the supervisor to the RDC, which will make recommendation to the Dean Academic Affairs for continuation of the candidate in the PhD Programme.

11. Open Pre-Submission Seminar

There will be an open presentation of the work done by the candidate before the thesis is bound and submitted for evaluation provided that the candidate has published one research paper in a refereed journal or has at least two research papers published / accepted in a conference on the basis of his PhD research work. The candidate shall produce evidence of the same in the form of acceptance letter or the reprint. The RDC may recommend modification or extension of the work required before the thesis is completed.

A certificate from the supervisor(s) stating that all modifications, if any, recommended by RDC have been incorporated, the research work being reported is the original contribution of the candidate and the work has not been presented anywhere else for the award of any other degree, will be appended to the bound thesis.

12. Submission of Thesis

A thesis may be submitted not earlier than 2 year from the date of registration or 3 years from the date of admission whichever is later. A brief synopsis of the thesis (not less than 1000 words and not more than 2000 words) must accompany the thesis. The thesis must strictly fulfill the requirements of the format prescribed by Senate Post-Graduate Committee. The candidate should submit four hardbound copies of the thesis along with six copies of the synopsis for evaluation by the Thesis Reading Board. Soft copy of synopsis as well as of thesis must accompany the hard copies at the time of submission of thesis.

13. Thesis Reading Board

To evaluate the PhD thesis submitted by a PhD candidate a panel of 6 readers (evaluators), as far as possible from the authors/experts who have been cited in the thesis of the candidate, will be proposed by the supervisor of the candidate out of which at least 3 will be from IISc, IITs, NITs, universities <u>and organizations within or</u> outside the country. The panel should be duly recommended by the Head of the Department and sent to the Chairman, Senate <u>through Dean Academic Affairs</u> for approval/addition/deletion and listing in a preferential order that is to be kept confidential. Synopsis of

the thesis prepared by the candidate will be sent to the top 3 readers from the list approved by the Chairman, Senate for obtaining their willingness to evaluate the thesis. On receiving the acceptance from all the top 3 readers, the copies of the thesis will be sent to the top 2 readers from the list for evaluation out of which at least one shall be from outside the state. In case the acceptance is received from only 2 readers the thesis will be sent to these readers. In case of a refusal of two or more than 2 readers from this list, the next readers in the list of 6 readers mentioned above will be approached for the willingness to evaluate the thesis.

The readers(evaluators) of the thesis will be required to submit detailed reports and make summary recommendations as to whether the

- (a) Thesis is acceptable as it is (or with minor corrections)
- (b) Thesis is acceptable but requires significant modifications (which must be carried out by the candidate and approved by the same reader who has sent these recommendations)
- (c) Thesis is rejected out right.

Only the theses that are rated acceptable by both the readers (after incorporation of modifications, when required) will be processed further.

In case the report from one of the readers is rated not acceptable even after the modifications are incorporated, the reports of both the readers will be sent to an independent referee to be appointed by the Chairman Senate from the list of 6 readers for final verdict about the acceptability of the thesis.

Further, in case the list of approved readers is exhausted, more names could be invited by Chairman Senate for the purpose.

14. Oral Defence Board

Based on reports from the Thesis Reading Board, the Oral Defence Board will examine the candidate through an openly defended Seminar/Viva Voce for the award of the PhD degree. Oral Defence Board will consist of

- (a) One of the Readers of the thesis and
- (b) The Supervisor(s) of the PhD thesis.
- (c) The Chairman RDC

In case the Chairman RDC is also the supervisor, the Chairman Senate will nominate an additional member to the Board.

The Chairman RDC will coordinate the conduct of the Oral Defence on a date suitable to and in consultations with Reader of the Thesis, Supervisor(s) and the candidate.

Based on satisfactory performance of the candidate in the Oral Defence, the Oral Defence Board will send its recommendation to Chairman Senate for the approval by the Senate, PEC University of Technology for the award of PhD degree.

15. Duration

The minimum duration of the PhD Programme will be 3 years from the date of admission. The maximum duration will be limited to 5 years from the date of registration. The Chairman Senate can grant extension beyond this period only after the candidate again presents a State-of-Art Seminar with current status of research work and *this* is approved through the same channel as it was done in the first instance provided that the supervisor of the candidate recommends the extension.

16. Research Degree Committee

Each department will constitute a Research Degree Committee for a two-year term consisting of

- i. Chairman of RDC Head of the Department with a PhD Degree otherwise senior most Professor of the department with PhD Degree, failing which a senior professor from an allied department with PhD degree may be nominated by the Chairman Senate.
- ii. All Professors of the department.
- iii. Two faculty members with PhD degree other than the Professors by rotation. If faculty members with PhD degree are not available in the department, then the Chairman, Senate, can nominate these from an allied department. In case of Applied Sciences department at least one faculty member with PhD degree from various constituents/ disciplines in the department may be taken on rotational basis.
- iv. One Professor from an allied Department nominated by the Chairman Senate.

17. Repository with UGC

Following the successful completion of the evaluation process and announcements of the award of PhD, the university shall submit a soft copy of the PhD thesis to the UGC within a period of thirty days for posting the same in INFLIBNET, accessible to all institutions/universities.

Along with the degree, the University/Institution, shall issue a *provisional* certificate certifying to the fact that the degree has been awarded in accordance with the provisions to the UGC Regulations 2009.

18. Other Rules

Rules pertaining to leave of absence, vacation, discipline and other such matters will be same as those for students of Master's Programmes in the Institute or those framed specifically for PhD Programme.

19. Interpretation of Rules

For any interpretation of these rules, the matter shall be referred to Chairman, Senate.

20. Amendment of Rules

These rules can be amended by the Senate depending upon the academic requirements of the Institute.

Guidelines for Summer Term

A student cannot be allowed to register for a particular summer course in case of any of the following:

- 1. If the student had been punished for using Unfair Means in any of the exams of that course during the regular semester.
- 2. If the student did not fulfill the attendance requirements for that course during the regular semester and hence got an 'N' grade in that course.

In view of the short duration of the summer term, late registration and adding and dropping of courses are not normally permitted.

Further conditions for the Summer Courses for BE and ME students are given below:

B.E. Students

- 1. A summer term course may be offered by a department of the recommendations of DUGC.
- 2. Courses would normally be run during summer term only if the number of students is sufficient Minimum 3 students for a discipline core course and minimum 5 students for a common course (Basic Sciences/Technical Arts/Engineering Core).
- 3. No Lab Course / Capstone Project would be offered during the Summer Term.
- 4. For the First Year Humanities Course, only one of the available options may be offered during the summer term, provided a sufficient number of students are willing to take up that. A student, who had studied and failed to clear a different option during the regular semester, can also take up the alternative option being offered during the summer term.
- 5. Students can register for a maximum of two courses during summer term, including those in the Self-study Mode (See clauses 9 and 10 below).
- 6. A student will have to register within the specified time by paying the prescribed fees as approved by the institute from time to time.
- 7. A summer term course is open only to the following categories of students:
 - (i) Students who had taken up that course earlier and failed (i.e. secured an 'F' grade).
 - (ii) Students whose load had been reduced during the regular semester by DUGC.
 - (iii) Students who have been given special permission by the Senate (for bonafide reasons such as illness etc).
 - (iv) Student who have cleared all the courses of 8 semesters but failed to secure a $CGPA \ge 5.00$, which is the essential requirement for getting the BE degree.
- 8. The total number of contract hours for the courses remains the same as that during the regular semester and therefore the courses run at an accelerated pace (twice the normal contract hours/week).
- 9. For those BE students who have gone through all their eight semesters, but have a backlog of not more than two courses, the pending courses could be offered in a self study mode, if the number of students is less than the minimum specified in 2 above. There would be no regular class-room teaching in self study mode, but the evaluation procedure would be the same as for a regular

course – Assignments Quizzes, Mid Term and End Term examination s etc. would be conducted as for a regular course.

- 10. Self Study course will be offered ONLY on the recommendation of the department with the mutual agreement of the student and the instructor (preferably the one who taught the course during the regular semester. No remuneration will be paid to the instructor for a self-study course.
- 11. A student who had an 'F' grade in a course in the regular semester will be awarded one grade lower than the actual grade secured by him in that course in summer term. However, if the student earns a 'D' grade in summer term, it will remain unaltered.

Further as per Clause 6.3 of the Rules and Procedures for the UG Programmes, E grade will not be available to the students in the summer term.

M.E. Students

- 1. No course will be offered during summer term to the M.E. students except for the common course in Mathematics. Only one of the prescribed Mathematics courses may be offered during the summer term provided a sufficient number of students are willing take up that. A student, who had studied and failed to clear a different course in Mathematics during the regular semester, can also take up the alternative course on offer during the summer term.
- 2. ME students can also register for Thesis work during Summer Term in case they have not been able to earn the required credits for the same during regular semesters. They can earn a maximum of 8 credits for thesis work during summer term.
- 3. A student who had an 'F' grade in a course in the regular semester will be awarded one grade lower than the actual grade secured by him in that course in summer term. However, if the student earns a 'D' grade in summer term, it will remain unaltered.

Use of Unfair Means during 1st Mid term / 2nd Mid term / End-semester Exams

Unfair Means during an examination encompass the following:

- (i) A student caught in possession of paper, books or notes relevant to the subject of examination.
- (ii) A student caught with written notes on any part of the clothes worn by the student or on any part of his body /on table /on desk /on chair /on calculator/ on foot-rule/on code book etc.
- (iii) A student caught in possession of any electronic gadgets except for a non-programmable calculator.
- (iv) A student caught talking to another student or any other person inside or outside the examination hall without per mission of the invigilator.
- (v) A student caught having copied or indulging in copying from any paper, book or notes.
- (vi) A student who has allowed or is found allowing any other student to copy any matter from his answer book or has in any manner rendered any assistance to another student in solving a question set in the question paper.
- (vii) If a candidate is found swallowing or attempting to swallow a note of paper or is guilty of causing disappearance of or destroying any such material.
- (viii) If during the examination a student is found consulting books, notes or papers or any other matter while outside the examination hall on the pretext of drinking water/using washroom before he/she has handed over the answer book to the invigilator.
- (ix) Writing anything on question paper except student ID.
- (x) If a student leaves the examination hall without delivering the answer book to the invigilator and takes away the same with him or intentionally tears off or otherwise disposes of his/her answer book or any part thereof.
- (xi) If a student changes his/her seat with another candidate or deliberately writes another student's ID on his/her answer book.
- (xii) A candidate found guilty of misconduct/misbehavior with the invigilator inside/outside the examination hall.
- (xiii) Any other person impersonates an eligible student and appears/tries to appear in the examination on behalf of the student.
- (xiv) If a student uses abusive or obscene language in the answer book.

Procedure to be followed for reporting Unfair Means Cases

Once a student is caught by an invigilator adopting unfair means during an examination:

- (i) The invigilator will collect the Answer Book and incriminating material (if any) from the student.
- (ii) If any incriminating material is caught, the invigilator will ask the student to sign the same and would put his/her own signature and all other Invigilators in the hall will also put their signatures along with date.

- (iii) If the student destroys the evidence by any means or refuses to sign, the invigilator would record the same in his/her report.
- (iv) The invigilator will write UMC on the Answer Book of the student alongwith his/her signature.
- (v) The invigilator will fill up the Unfair Means Case Report and it will be signed by all the Invigilators present in the examination hall (proforma of the UMC report to be provided to each invigilator by the respective deptt.).
- (vi) No second answer book will be given to the student and the student will be turned out of the examination hall by the Invigilators.
- (vii) The complete report along with incriminating material (if any) and answer book will be forwarded to Chairman DUGC/ DPGC of the respective department except for BE 1st year students, in whose case it will be forwarded to Chairman, DUGC, Applied Sciences Department.
- (viii) Chairman DUGC/DPGC will invite the Invigilator who made the unfair means case and Course Coordinator in the meeting called for recommending the punishment to be awarded to the student.

Punishment for Unfair Means cases

For offences at Sr. No. (xii), (xiii) & (xiv) the student will be suspended from the institute for one year. In case of (xiii), the person impersonating the student shall also be suspended from the institute for one year if that person is on rolls of the institute.

For other offences the punishments are as under:-

- (i) For the first offence by a student during his/her stay in PEC he/she will be awarded zero marks for the particular course, in that examination in which he/she is caught using unfair means.
- (ii) Second offence by the same student (in any examn/course) during his/her stay in PEC will be punished by awarding him/her 'F' grade in the particular course and he/she will not be eligible to register for this particular course in the summer term.
- (iii) For the third offence by the same student, he/she will be suspended from the Institute for one year.

A student found guilty of approaching or influencing a member of the DUGC/DPGC, directly or indirectly regarding his/her unfair means case, shall be suspended for one year in addition to the punishment awarded to him/her for his/her offence for using unfair means under these regulations.

Punishing Authority

Chairman Senate will be the punishing authority for all unfair means cases and the Dean Academic Affairs will issue the punishment letter to the student.

General Instructions

- (i) DUGC/DPGC of each deptt. will maintain proper record of all Unfair Means Cases. A copy of the same shall also be sent to the office of DAA for record.
- (ii) At the end of every year a copy of the record of Unfair Means Cases of 1st year students of that year will be sent to all Deptts. by the Applied Sc. Deptt.
- (iii) A copy of the punishment letter will also be issued to the following:
 - (a) Concerned Course Instructors
 - (b) Parents of the Student
 - (c) Chairman DUGC/DPGC of the concerned department

UGC REGULATIONS (ON CURBING THE MENACE OF RAGGING)

UNIVERSITY GRANTS COMMISSION BAHADURSHAH ZAFAR MARG NEW DELHI – 110 002

UGC REGULATIONS ON CURBING THE MENACE OF RAGGING IN HIGHER EDUCATIONAL INSTITUTIONS, 2009

(under Section 26 (1)(g) of the University Grants Commission Act, 1956)

(TO BE PUBLISHED IN THE GAZETTE OF INDIA PART III, SECTION-4)

F.1-16/2007(CPP-II)

Dated 17th June, 2009

PREAMBLE

In view of the directions of the Hon'ble Supreme Court in the matter of "University of Kerala v/s. Council, Principals, Colleges and others" in SLP no. 24295 of 2006 dated 16.05.2007 and that dated 8.05.2009 in Civil Appeal number 887 of 2009, and in consideration of the determination of the Central Government and the University Grants Commission to prohibit, prevent and eliminate the scourge of ragging including any conduct by any student or students whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other student, or indulging in rowdy or indisciplined activities by any student or students which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in any fresher or any other student or asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student, with or without an intent to derive a sadistic pleasure or showing off power, authority or superiority by a student over any fresher or any other student, in all higher education institutions in the country, and thereby, to provide for the healthy development, physically and psychologically, of all students, the University Grants Commission, in consultation with the Councils, brings forth this Regulation.

In exercise of the powers conferred by Clause (g) of sub-section (1) of Section 26 of the University Grants Commission Act, 1956, the University Grants Commission hereby makes the following Regulations, namely;

1. Title, commencement and applicability

- 1.1 These regulations shall be called the "UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009".
- 1.2 They shall come into force from the date of their publication in the Official Gazette
- 1.3 They shall apply to all the institutions coming within the definition of an University under subsection (f) of section (2) of the University Grants Commission Act, 1956, and to all institutions deemed to be a university under Section 3 of the University Grants Commission Act, 1956, to all other higher educational institutions, or elements of such universities or institutions, including its departments, constituent units and all the premises, whether being academic, residential, playgrounds, canteen, or other such premises of such universities, deemed universities and higher educational institutions, whether located within the campus or outside, and to all means of transportation of students, whether public or private, accessed by students for the pursuit of studies in such universities, deemed universities and higher educational institutions

2. Objectives

To prohibit any conduct by any student or students whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other student, or indulging in rowdy or indisciplined activities by any student or students which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in any fresher or any other student or asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student, with or without an intent to derive a sadistic pleasure or showing off power, authority or superiority by a student over any fresher or any other student; and thereby, to eliminate ragging in all its forms from universities, deemed universities and other higher educational institutions in the country by prohibiting it under these Regulations, preventing its occurrence and punishing those who indulge in ragging as provided for in these Regulations and the appropriate law in force

4. What constitutes Ragging:

Ragging constitutes one or more of any of the following acts

- a. any conduct by any student or students whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other student;
- b. indulging in rowdy or indisciplined activities by any student or students which causes or is likely to cause annoyance, hardship, physical or psychological harm or to raise fear or apprehension thereof in any fresher or any other student;
- c. asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student;
- d. any act by a senior student that prevents, disrupts or disturbs the regular academic activity of any other student or a fresher;
- e. exploiting the services of a fresher or any other student for completing the academic tasks assigned to an individual or a group of students
- f. any act of financial extortion or forceful expenditure burden put on a fresher or any other student by students
- g. any act of physical abuse including all variants of it: sexual abuse, homosexual assaults, stripping, forcing obscene and lewd acts, gestures, causing bodily harm or any other danger to health or person;
- h. any act or abuse by spoken words, emails, post, public insults which would also include deriving perverted pleasure, vicarious or sadistic thrill from actively or passively participating in the discomfiture to fresher or any other student
- i. any act that affects the mental health and self-confidence of a fresher or any other student

with or without an intent to derive a sadistic pleasure or showing off power, authority or superiority by a student over any fresher or any other student

4. Definitions.-

- 1. In these regulations unless the context otherwise requires,
 - a) "Act" means, the University Grants Commission Act, 1956 (3 of 1956);
 - b) "Academic year" means the period from the commencement of admission of students in any course of study in the institution up to the completion of academic requirements for that particular year
 - c) "Anti-Ragging Helpline" means the Helpline established under clause (a) of Regulation 8.1 of these Regulations
 - d) "Commission" means the University Grants Commission
 - e) "Council" means a body so constituted by an Act of Parliament or an Act of any State Legislature for setting, or co-ordinating or maintaining standards in the relevant areas of higher

- education, such as the All India Council for Technical Education (AICTE), the Bar Council of India (BCI), the Dental Council of India (DCI), the Distance Education Council (DEC), the Indian Council of Agricultural Research (ICAR), the Indian Nursing Council (INC), the Medical Council of India (MCI), the National Council for Teacher Education (NCTE), the Pharmacy Council of India (PCI), etc. and the State Higher Education Councils
- f) "District Level Anti-Ragging Committee" means the Committee, headed by the District Magistrate, constituted by the State Government, for the control and elimination of ragging in institutions within the jurisdiction of the district
- g) "Head of the institution" means the Vice-Chancellor in case of a university or a deemed to be university, the Principal or the Director or such other designation as the executive head of the institution or the college is referred
- h) "Fresher" means a student who has been admitted to an institution and who is undergoing his/her first year of study in such institution.
- i) "Institution" means a higher educational institution including, but not limited to an university, a deemed to be university, a college, an institute, an institution of national importance set up by an Act of Parliament or a constituent unit of such institution, imparting higher education beyond 12 years of schooling leading to, but not necessarily culminating in, a degree (graduate, postgraduate and/or higher level) and/or to a university diploma
- j) "NAAC" means the National Academic and Accreditation Council established by the Commission under section 12(ccc) of the Act
- k) "State Level Monitoring Cell" means the body constituted by the State Government for the control and elimination of ragging in institutions within the jurisdiction of the State, established under a State Law or on the advice of the Central Government, as the case may be
- 2. Words and expressions used and not defined herein but defined in the Act or in the General Clauses Act, 1897, shall have the meanings respectively assigned to them in the Act or in the General Clauses Act, 1897, as the case may be.

5. Measures for prohibition of ragging at the institution level:

- a) No institution or any part of it thereof, including its elements, including, but not limited to, the departments, constituent units, colleges, centres of studies and all its premises, whether academic, residential, playgrounds, or canteen, whether located within the campus or outside, and in all means of transportation of students, whether public or private, accessed by students for the pursuit of studies in such institutions, shall permit or condone any reported incident of ragging in any form; and all institutions shall take all necessary and required measures, including but not limited to the provisions of these Regulations, to achieve the objective of eliminating ragging, within the institution or outside
- b) All institutions shall take action in accordance with these Regulations against those found guilty of ragging and/or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.

6. Measures for prevention of ragging at the institution level.-

- 6.1 An institution shall take the following steps in regard to admission or registration of students; namely
 - a) Every public declaration of intent by any institution, in any electronic, audio- visual or print or any other media, for admission of students to any course of study shall expressly provide that ragging is totally prohibited in the institution and anyone found guilty of ragging and/or abetting ragging, whether actively or passively, or being a part of a conspiracy to promote ragging, is liable to be punished in accordance with these Regulations as well as under the provisions of any penal law for the time being in force.
 - b) The brochure of admission/instruction booklet or the prospectus, whether in print or electronic format, shall prominently print these Regulations in full.

Provided that the institution shall also draw attention to any law concerning ragging and its consequences, as may be applicable to the institution publishing such brochure of admission/instruction booklet or the prospectus.

Provided further that the telephone numbers of the Anti-Ragging Helpline and all the important functionaries in the institution, including but not limited to the Head of the institution, faculty members, members of the Anti-Ragging Committees and Anti-Ragging Squads, District and Sub-Divisional authorities, Wardens of hostels, and other functionaries or authorities where relevant, shall be published in the brochure of admission/instruction booklet or the prospectus.

- c) Where an institution is affiliated to a University and publishes a brochure of admission/instruction booklet or a prospectus, the affiliating university shall ensure that the affiliated institution shall comply with the provisions of clause (a) and clause (b) of Regulation 6.1 of these Regulations
- d) The application form for admission, enrolment or registration shall contain an affidavit, mandatorily in English and in Hindi and/or in one of the regional languages known to the applicant, as provided in the English language in Annexure VII to these Regulations, to be filled up and signed by the applicant to the effect that he/she has read and understood the provisions of these Regulations as well as the provisions of any other law for the time being in force, and is aware of the prohibition of ragging and the punishments prescribed, both under penal laws as well as under these Regulations and also affirm to the effect that he/she has not been expelled and/or debarred by any institution and further aver that he/she would not indulge, actively or passively, in the act or abet the act of ragging and if found guilty of ragging and/or abetting ragging, is liable to be proceeded against under these Regulations or under any penal law or any other law for the time being in force and such action would include but is not limited to debarment or expulsion of such student.
- e) The application form for admission, enrolment or registration shall contain an affidavit, mandatorily in English and in Hindi and/or in one of the regional languages known to the parents/guardians of the applicant, as provided in the English language in Annexure I to these Regulations, to be filled up and signed by the parents/guardians of the applicant to the effect that he/she has read and understood the provisions of these Regulations as well as the provisions of any other law for the time being in force, and is aware of the prohibition of ragging and the punishments prescribed, both under penal laws as well as under these Regulations and also affirm to the effect that his/her ward has not been expelled and/or debarred by any institution and further aver that his/her ward would not indulge, actively or passively, in the act or abet the act of ragging and if found guilty of ragging and/or abetting ragging, his/her ward is liable to be proceeded against under these Regulations or under any penal law or any other law for the time being in force and such action would include but is not limited to debarment or expulsion of his/her ward
- f) The application for admission shall be accompanied by a document in the form of, or annexed to, the School Leaving Certificate/Transfer Certificate/Migration Certificate/Character Certificate reporting on the inter-personal/social behavioural pattern of the applicant, to be issued by the school or institution last attended by the applicant, so that the institution can thereafter keep watch on the applicant, if admitted, whose behaviour has been commented in such document.
- g) A student seeking admission to a hostel forming part of the institution, or seeking to reside in any temporary premises not forming part of the institution, including a private commercially managed lodge or hostel, shall have to submit additional affidavits countersigned by his/her parents/guardians in the form prescribed in Annexure VII and Annexure VIII to these Regulations respectively along with his/her application.
- h) Before the commencement of the academic session in any institution, the Head of the Institution shall convene and address a meeting of various functionaries/agencies, such as Hostel Wardens, representatives of students parents/ guardians, faculty, district administration including the police, to discuss the measures to be taken to prevent ragging in the institution and steps to be taken to identify those indulging in or abetting ragging and punish them.
- i) The institution shall, to make the community at large and the students in particular aware of the dehumanizing effect of ragging, and the approach of the institution towards those indulging in ragging, prominently display posters depicting the provisions of penal law applicable to incidents of ragging, and the provisions of these Regulations and also any other law for the time being in force, and the punishments thereof, shall be prominently displayed on Notice Boards of all

- departments, hostels and other buildings as well as at places, where students normally gather and at places, known to be vulnerable to occurrences of ragging incidents
- j) The institution shall request the media to give adequate publicity to the law prohibiting ragging and the negative aspects of ragging and the institution's resolve to ban ragging and punish those found guilty without fear or favour
- k) The institution shall identify, properly illuminate and keep a close watch on all locations known to be vulnerable to occurrences of ragging incidents
- 1) The institution shall tighten security in its premises, especially at vulnerable places and intense policing by Anti-Ragging Squad, referred to in these Regulations and volunteers, if any, shall be resorted to at such points at odd hours during the first few months of the academic session
- m) The institution shall utilize the vacation period before the start of the new academic year to launch a publicity campaign against ragging through posters, and such other means, as may be desirable or required, to promote the objectives of these Regulations
- n) The faculties/departments/units of the institution shall have induction arrangements, including those which anticipate, identify and plan to meet any special needs of any specific section of students, in place well in advance of the beginning of the academic year with an aim to promote the objectives of this Regulation
- o) Every institution shall engage or seek the assistance of professional counsellors before the commencement of the academic session, to be available when required by the institution, for the purposes of offering counselling to freshers and to other students after the commencement of the academic year.
- p) The head of the institution shall provide information to the local police and local authorities, the details of every privately commercially managed hostels or lodges used for residential purposes by students enrolled in the institution and the head of the institution shall also ensure that the Anti-Ragging Squad shall ensure vigil in such locations to prevent the occurrence of ragging therein
- 6.2 An institution shall, on admission or enrolment or registration of students, take the following steps, namely
 - a) Every fresh student admitted to the institution shall be given a printed leaflet detailing to whom he/she has to turn to for help and guidance for various purposes including addresses and telephone numbers, so as to enable the student to contact the concerned person at any time, if and when required, of the Anti-Ragging Helpline referred to in these Regulations, Wardens, Head of the institution, all members of the anti-ragging squads and committees, relevant district and police authorities
 - b) The institution, through the leaflet specified in clause (a) of Regulation 6.2 of these Regulations shall explain to the freshers, the arrangements made for their induction and orientation which promote efficient and effective means of integrating them fully as students with those already admitted o the institution in earlier years.
 - c) The leaflet specified in clause (a) of Regulation 6.2 of these Regulations shall inform the freshers about their rights as bona fide students of the institution and clearly instructing them that they should desist from doing anything, with or against their will, even if ordered to by the seniors students, and that any attempt of ragging shall be promptly reported to the Anti-ragging Squad or to the Warden or to the Head of the institution, as the case may be
 - d) The leaflet specified in clause (a) of Regulation 6.2 of these Regulations shall contain a calendar of events and activities laid down by the institution to facilitate and complement familiarization of freshers with the academic environment of the institution.
 - The institution shall, on the arrival of senior students after the first week or after the second week, as the case may be, schedule orientation programmes as follows, namely; (i) joint sensitization programme and counselling of both freshers and senior students by a professional counsellor, referred to in clause (o) of Regulation 6.1 of these Regulations; (ii) joint orientation programme of freshers and seniors to be addressed by the Head of the institution and the anti-ragging committee; (iii) organization on a large scale of cultural, sports and other activities to provide a platform for the freshers and seniors to interact in the presence of faculty members; (iv) in the hostel, the warden should address all students; and may request two junior colleagues from the college faculty to assist the warden by becoming resident tutors for a temporary

- duration.(v) as far as possible faculty members should dine with the hostel residents in their respective hostels to instil a feeling of confidence among the freshers.
- f) The institution shall set up appropriate committees, including the course-in-charge, student advisor, Wardens and some senior students as its members, to actively monitor, promote and regulate healthy interaction between the freshers, junior students and senior students
- g) Freshers or any other student(s), whether being victims, or witnesses, in any incident of ragging, shall be encouraged to report such occurrence, and the identity of such informants shall be protected and shall not be subject to any adverse consequence only for the reason for having reported such incidents
- h) Each batch of freshers, on arrival at the institution, shall be divided into small groups and each such group shall be assigned to a member of the faculty, who shall interact individually with each member of the group every day for ascertaining the problems or difficulties, if any, faced by the fresher in the institution and shall extend necessary help to the fresher in overcoming the same.
- i) It shall be the responsibility of the member of the faculty assigned to the group of freshers, to coordinate with the Wardens of the hostels and to make surprise visits to the rooms in such hostels, where a member or members of the group are lodged; and such member of faculty shall maintain a diary of his/her interaction with the freshers under his/her charge.
- j) Freshers shall be lodged, as far as may be, in a separate hostel block, and where such facilities are not available, the institution shall ensure that access of seniors to accommodation allotted to freshers is strictly monitored by wardens, security guards and other staff of the institution.
- k) A round the clock vigil against ragging in the hostel premises, in order to prevent ragging in the hostels after the classes are over, shall be ensured by the institution.
- 1) It shall be the responsibility of the parents/guardians of freshers to promptly bring any instance of ragging to the notice of the Head of the Institution.
- m) Every student studying in the institution and his/her parents/guardians shall provide the specific affidavits required under clauses (d), (e) and (g) of Regulation 6.1 of these Regulations at the time of admission or registration, as the case may be, during each academic year.
- n) Every institution shall obtain the affidavit from every student as referred to above in clause (m) of Regulation 6.2 and maintain a proper record of the same and to ensure its safe upkeep thereof, including maintaining the copies of the affidavit in an electronic form, to be accessed easily when required either by the Commission or any of the Councils or by the institution or by the affiliating University or by any other person or organisation authorised to do so.
- o) Every student at the time of his/her registration shall inform the institution about his/her place of residence while pursuing the course of study, and in case the student has not decided his/her place of residence or intends to change the same, the details of his place of residence shall be provided immediately on deciding the same; and specifically in regard to a private commercially managed lodge or hostel where he/she has taken up residence.
- p) The Head of the institution shall, on the basis of the information provided by the student under clause (o) of Regulation 6.2, apportion sectors to be assigned to members of the faculty, so that such member of faculty can maintain vigil and report any incident of ragging outside the campus or en route while commuting to the institution using any means of transportation of students, whether public or private.
- q) The Head of the institution shall, at the end of each academic year, send a letter to the parents/guardians of the students who are completing their first year in the institution, informing them about these Regulations and any law for the time being in force prohibiting ragging and the punishments thereof as well as punishments prescribed under the penal laws, and appealing to them to impress upon their wards to desist from indulging in ragging on their return to the institution at the beginning of the academic session next

6.3 Every institution shall constitute the following bodies; namely

a) Every institution shall constitute a Committee to be known as the Anti-Ragging Committee to be nominated and headed by the Head of the institution, and consisting of representatives of civil and police administration, local media, Non Government Organizations involved in youth activities, representatives of faculty members, representatives of parents, representatives of

- students belonging to the freshers' category as well as senior students, non-teaching staff; and shall have a diverse mix of membership in terms of levels as well as gender
- b) It shall be the duty of the Anti-Ragging Committee to ensure compliance with the provisions of these Regulations as well as the provisions of any law for the time being in force concerning ragging; and also to monitor and oversee the performance of the Anti-Ragging Squad in prevention of ragging in the institution.
- c) Every institution shall also constitute a smaller body to be known as the Anti- Ragging Squad to be nominated by the Head of the Institution with such representation as may be considered necessary for maintaining vigil, oversight and patrolling functions and shall remain mobile, alert and active at all times.
 - Provided that the Anti-Ragging Squad shall have representation of various members of the campus community and shall have no outside representation
- d) It shall be the duty of the Anti-Ragging Squad to be called upon to make surprise raids on hostels, and other places vulnerable to incidents of, and having the potential of, ragging and shall be empowered to inspect such places.
- e) It shall also be the duty of the Anti-Ragging Squad to conduct an on-the-spot enquiry into any incident of ragging referred to it by the Head of the institution or any member of the faculty or any member of the staff or any student or any parent or guardian or any employee of a service provider or by any other person, as the case may be; and the enquiry report along with recommendations shall be submitted to the Anti-Ragging Committee for action under clause (a) of Regulation 9.1.
 - Provided that the Anti-Ragging Squad shall conduct such enquiry observing a fair and transparent procedure and the principles of natural justice and after giving adequate opportunity to the student or students accused of ragging and other witnesses to place before it the facts, documents and views concerning the incident of ragging, and considering such other relevant information as may be required
- f) Every institution shall, at the end of each academic year, in order to promote the objectives of these Regulations, constitute a Mentoring Cell consisting of students volunteering to be Mentors for freshers, in the succeeding academic year; and there shall be as many levels or tiers of Mentors as the number of batches in the institution, at the rate of one Mentor for six freshers and one Mentor of a higher level for six Mentors of the lower level.
- g) Every University shall constitute a body to be known as Monitoring Cell on Ragging, which shall coordinate with the affiliated colleges and institutions under the domain of the University to achieve the objectives of these Regulations; and the Monitoring Cell shall call for reports from the Heads of institutions in regard to the activities of the Anti-Ragging Committees, Anti-Ragging Squads, and the Mentoring Cells at the institutions, and it shall also keep itself abreast of the decisions of the District level Anti-Ragging Committee headed by the District Magistrate.
- h) The Monitoring Cell shall also review the efforts made by institutions to publicize anti-ragging measures, soliciting of affidavits from parents/guardians and from students, each academic year, to abstain from ragging activities or willingness to be penalized for violations; and shall function as the prime mover for initiating action on the part of the appropriate authorities of the university for amending the Statutes or Ordinances or Bye-laws to facilitate the implementation of anti-ragging measures at the level of the institution.

6.4 Every institution shall take the following other measures, namely

- a) Each hostel or a place where groups of students reside, forming part of the institution, shall have a full-time Warden, to be appointed by the institution as per the eligibility criteria laid down for the post reflecting both the command and control aspects of maintaining discipline and preventing incidents of ragging within the hostel, as well as the softer skills of counselling and communicating with the youth outside the class-room situation; and who shall reside within the hostel, or at the very least, in the close vicinity thereof.
- b) The Warden shall be accessible at all hours and be available on telephone and other modes of communication, and for the purpose the Warden shall be provided with a mobile phone by the institution, the number of which shall be publicised among all students residing in the hostel.

- c) The institution shall review and suitably enhance the power of Wardens; and the security personnel posted in hostels shall be under the direct control of the Warden and their performance shall be assessed by them.
- d) The professional counsellors referred to under clause (o) of Regulation 6.1 of these Regulations shall, at the time of admission, counsel freshers and/or any other student(s) desiring counselling, in order to prepare them for the life ahead, particularly in regard to the life in hostels and to the extent possible, also involve parents and teachers in the counselling sessions.
- e) The institution shall undertake measures for extensive publicity against ragging by means of audio-visual aids, counselling sessions, workshops, painting and design competitions among students and such other measures, as it may deem fit.
- f) In order to enable a student or any person to communicate with the Anti- Ragging Helpline, every institution shall permit unrestricted access to mobile phones and public phones in hostels and campuses, other than in class-rooms, seminar halls, library, and in such other places that the institution may deem it necessary to restrict the use of phones.
- g) The faculty of the institution and its non-teaching staff, which includes but is not limited to the administrative staff, contract employees, security guards and employees of service providers providing services within the institution, shall be sensitized towards the ills of ragging, its prevention and the consequences thereof.
- h) The institution shall obtain an undertaking from every employee of the institution including all teaching and non-teaching members of staff, contract labour employed in the premises either for running canteen or as watch and ward staff or for cleaning or maintenance of the buildings/lawns and employees of service providers providing services within the institution, that he/she would report promptly any case of ragging which comes to his/her notice.
- i) The institution shall make a provision in the service rules of its employees for issuing certificates of appreciation to such members of the staff who report incidents of ragging, which will form part of their service record.
- j) The institution shall give necessary instructions to the employees of the canteens and messing, whether that of the institution or that of a service provider providing this service, or their employers, as the case may be, to keep a strict vigil in the area of their work and to report the incidents of ragging to the Head of the institution or members of the Anti-Ragging Squad or members of the Anti-Ragging Committee or the Wardens, as may be required.
- k) All Universities awarding a degree in education at any level shall be required to ensure that institutions imparting instruction in such courses or conducting training programme for teachers include inputs relating to anti-ragging and the appreciation of the relevant human rights, as well as inputs on topics regarding sensitization against corporal punishments and checking of bullying amongst students, so that every teacher is equipped to handle at least the rudiments of the counselling approach.
- Discreet random surveys shall be conducted amongst the freshers every fortnight during the first three months of the academic year to verify and cross-check whether the institution is indeed free of ragging or not and for the purpose the institution may design its own methodology of conducting such surveys.
- m) The institution shall cause to have an entry, apart from those relating to general conduct and behaviour, made in the Migration/Transfer Certificate issued to the student while leaving the institution, as to whether the student has been punished for committing or abetting an act of ragging, as also whether the student has displayed persistent violent or aggressive behaviour or any inclination to harm others, during his course of study in the institution.
- n) Notwithstanding anything contained in these Regulations with regard to obligations and responsibilities pertaining to the authorities or members of bodies prescribed above, it shall be the general collective responsibility of all levels and sections of authorities or functionaries including members of the faculty and employees of the institution, whether regular or temporary, and employees of service providers providing service within the institution, to prevent or to act promptly against the occurrence of ragging or any incident of ragging which comes to their notice.
- o) The Heads of institutions affiliated to a University or a constituent of the University, as the case may be, shall, during the first three months of an academic year, submit a weekly report on the status of compliance with Anti-Ragging measures under these Regulations, and a monthly report

- on such status thereafter, to the Vice-Chancellor of the University to which the institution is affiliated to or recognized by.
- p) The Vice Chancellor of each University, shall submit fortnightly reports of the University, including those of the Monitoring Cell on Ragging in case of an affiliating university, to the State Level Monitoring Cell.
- Action to be taken by the Head of the institution. On receipt of the recommendation of the Anti Ragging Squad or on receipt of any information concerning any reported incident of ragging, the Head of institution shall immediately determine if a case under the penal laws is made out and if so, either on his own or through a member of the Anti-Ragging Committee authorised by him in this behalf, proceed to file a First Information Report (FIR), within twenty four hours of receipt of such information or recommendation, with the police and local authorities, under the appropriate penal provisions relating to one or more of the following, namely;
 - i. Abetment to ragging
 - ii. Criminal conspiracy to rag
 - iii. Unlawful assembly and rioting while ragging
 - iv. Public nuisance created during ragging
 - v. Violation of decency and morals through ragging
 - vi. Injury to body, causing hurt or grievous hurt
 - vii. Wrongful restraint
 - viii. Wrongful confinement
 - ix. Use of criminal force
 - x. Assault as well as sexual offences or unnatural offences
 - xi. Extortion
 - xii. Criminal trespass
 - xiii. Offences against property
 - xiv. Criminal intimidation
 - xv. Attempts to commit any or all of the above mentioned offences against the victim(s)
 - xvi. Threat to commit any or all of the above mentioned offences against the victim(s)
 - xvii. Physical or psychological humiliation
 - xviii. All other offences following from the definition of "Ragging"

Provided that the Head of the institution shall forthwith report the occurrence of the incident of ragging to the District Level Anti-Ragging Committee and the Nodal officer of the affiliating University, if the institution is an affiliated institution.

Provided further that the institution shall also continue with its own enquiry initiated under clause 9 of these Regulations and other measures without waiting for action on the part of the police/local authorities and such remedial action shall be initiated and completed immediately and in no case later than a period of seven days of the reported occurrence of the incident of ragging

- 8. Duties and Responsibilities of the Commission and the Councils
 - 8.1 The Commission shall, with regard to providing facilitating communication of information regarding incidents of ragging in any institution, take the following steps, namely;
 - a) The Commission shall establish, fund and operate, a toll-free Anti-Ragging Helpline, operational round the clock, which could be accessed by students in distress owing to ragging related incidents.
 - b) Any distress message received at the Anti-Ragging Helpline shall be simultaneously relayed to the Head of the Institution, the Warden of the Hostels, the Nodal Officer of the affiliating University, if the incident reported has taken place in an institution affiliated to a University, the concerned District authorities and if so required, the District Magistrate, and the Superintendent of Police, and shall also be web enabled so as to be in the public domain simultaneously for the media and citizens to access it.

- c) The Head of the institution shall be obliged to act immediately in response to the information received from the Anti-Ragging Helpline as at sub-clause (b) of this clause.
- d) The telephone numbers of the Anti-Ragging Helpline and all the important functionaries in every institution, Heads of institutions, faculty members, members of the anti-ragging committees and anti ragging squads, district and sub-divisional authorities and state authorities, Wardens of hostels, and other functionaries or authorities where relevant, shall be widely disseminated for access or to seek help in emergencies.
- e) The Commission shall maintain an appropriate data base to be created out of affidavits, affirmed by each student and his/her parents/guardians and stored electronically by the institution, either on its or through an agency to be designated by it; and such database shall also function as a record of ragging complaints received, and the status of the action taken thereon.
- f) The Commission shall make available the database to a non-governmental agency to be nominated by the Central Government, to build confidence in the public and also to provide information of non compliance with these Regulations to the Councils and to such bodies as may be authorised by the Commission or by the Central Government.

8.2 The Commission shall take the following regulatory steps, namely;

- a) The Commission shall make it mandatory for the institutions to incorporate in their prospectus, the directions of the Central Government or the State Level Monitoring Committee with regard to prohibition and consequences of ragging, and that non-compliance with these Regulations and directions so provided, shall be considered as lowering of academic standards by the institution, therefore making it liable for appropriate action.
- b) The Commission shall verify that the institutions strictly comply with the requirement of getting the affidavits from the students and their parents/guardians as envisaged under these Regulations.
- c) The Commission shall include a specific condition in the Utilization Certificate, in respect of any financial assistance or grants-in-aid to any institution under any of the general or special schemes of the Commission, that the institution has complied with the anti-ragging measures.
- d) Any incident of ragging in an institution shall adversely affect its accreditation, ranking or grading by NAAC or by any other authorised accreditation agencies while assessing the institution for accreditation, ranking or grading purposes..
- e) The Commission may accord priority in financial grants-in-aid to those institutions, otherwise eligible to receive grants under section 12B of the Act, which report a blemishless record in terms of there being no reported incident of ragging.
- f) The Commission shall constitute an Inter-Council Committee, consisting of representatives of the various Councils, the Non-Governmental agency responsible for monitoring the database maintained by the Commission under clause (g) of Regulation 8.1 and such other bodies in higher education, to coordinate and monitor the anti-ragging measures in institutions across the country and to make recommendations from time to time; and shall meet at least once in six months each year.
- g) The Commission shall institute an Anti-Ragging Cell within the Commission as an institutional mechanism to provide secretarial support for collection of information and monitoring, and to coordinate with the State Level Monitoring Cell and University level Committees for effective implementation of anti-ragging measures, and the Cell shall also coordinate with the Non-Governmental agency responsible for monitoring the database maintained by the Commission appointed under clause (g) of Regulation 8.1.

9. Administrative action in the event of ragging

- 9.1 The institution shall punish a student found guilty of ragging after following the procedure and in the manner prescribed hereinunder:
- a) The Anti-Ragging Committee of the institution shall take an appropriate decision, in regard to punishment or otherwise, depending on the facts of each incident of ragging and nature and gravity of the incident of ragging established in the recommendations of the Anti-Ragging Squad.

- b) The Anti-Ragging Committee may, depending on the nature and gravity of the guilt established by the Anti-Ragging Squad, award, to those found guilty, one or more of the following punishments, namely;
- i. Suspension from attending classes and academic privileges.
- ii. Withholding/ withdrawing scholarship/ fellowship and other benefits.
- iii. Debarring from appearing in any test/ examination or other evaluation process.
- iv. Withholding results.
- v. Debarring from representing the institution in any regional, national or international meet, tournament, youth festival, etc.
- vi. Suspension/ expulsion from the hostel.
- vii. Cancellation of admission.
- viii. Rustication from the institution for period ranging from one to four semesters.
- ix. Expulsion from the institution and consequent debarring from admission to any other institution for a specified period. Provided that where the persons committing or abetting the act of ragging are not identified, the institution shall resort to collective punishment.
- c) An appeal against the order of punishment by the Anti-Ragging Committee shall lie,
- i. in case of an order of an institution, affiliated to or constituent part, of a University, to the Vice-Chancellor of the University;
- ii. in case of an order of a University, to its Chancellor
- iii. in case of an institution of national importance created by an Act of Parliament, to the Chairman or Chancellor of the institution, as the case may be.
- 9.2 Where an institution, being constituent of, affiliated to or recognized by a University, fails to comply with any of the provisions of these Regulations or fails to curb ragging effectively, such University may take any one or more of the following actions, namely;
- i. Withdrawal of affiliation/recognition or other privileges conferred.
- ii. Prohibiting such institution from presenting any student or students then undergoing any programme of study therein for the award of any degree/diploma of the University. Provided that where an institution is prohibited from presenting its student or students, the Commission shall make suitable arrangements for the other students so as to ensure that such students are able to pursue their academic studies.
- iii. Withholding grants allocated to it by the university, if any
- iv. Withholding any grants chanellised through the university to the institution.
- v. Any other appropriate penalty within the powers of the university.
- 9.3 Where in the opinion of the appointing authority, a lapse is attributable to any member of the faulty or staff of the institution, in the matter of reporting or taking prompt action to prevent an incident of ragging or who display an apathetic or insensitive attitude towards complaints of ragging, or who fail to take timely steps, whether required under these Regulations or otherwise, to prevent an incident or incidents of ragging, then such authority shall initiate departmental disciplinary action, in accordance with the prescribed procedure of the institution, against such member of the faulty or staff.
 - Provided that where such lapse is attributable to the Head of the institution, the authority designated to appoint such Head shall take such departmental disciplinary action; and such action shall be without prejudice to any action that may be taken under the penal laws for abetment of ragging for failure to take timely steps in the prevention of ragging or punishing any student found guilty of ragging.
- 9.4 The Commission shall, in respect of any institution that fails to take adequate steps to prevent ragging or fails to act in accordance with these Regulations or fails to punish perpetrators or incidents of ragging suitably, take one of more of the following measures, namely;
- i. Withdrawal of declaration of fitness to receive grants under section 12B of the Act.
- ii. Withholding any grant allocated.

- iii. Declaring the institution ineligible for consideration for any assistance under any of the general or special assistance programmes of the Commission.
- iv. Informing the general public, including potential candidates for admission, through a notice displayed prominently in the newspapers or other suitable media and posted on the website of the Commission, declaring that the institution does not possess the minimum academic standards.
- v. Taking such other action within its powers as it may deem fit and impose such other penalties as may be provided in the Act for such duration of time as the institution complies with the provisions of these Regulations.

Provided that the action taken under this clause by the Commission against any institution shall be shared with all Councils.

(Dr. R.K. Chauhan) Secretary

To, The Assistant Controller, Publication Division, Govt. of India, Ministry of Urban Development and Poverty Alleviation, Civil Lines Delhi -110 054

AFFIDAVIT BY THE STUDENT

I,	(full name of student with admission / registration / enrolment number) s/o d/o
Mr./M	Irs./Ms, having been
	ted to (name of the institution) have received a copy of the
UGC	Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009,
	nafter called the "Regulations") carefully read and fully understood the provisions contained in the
,	legulations.
2)	I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes
,	ragging.
3) I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am ful	
- /	of the penal and administrative action that is liable to be taken against me in case I am found
	guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote
	ragging.
4)	I hereby solemnly aver and undertake that
'/	a) I will not indulge in any behaviour or act that may be constituted as ragging under clause
	3 of the Regulations.
	b) I will not participate in or abet or propagate through any act of commission or omission
	that may be constituted as ragging under clause 3 of the Regulations.
5)	I hereby affirm that, if found guilty of ragging, I am liable for punishment according to clause 9.1
٥,	of the Regulations, without prejudice to any other criminal action that may be taken against me
	under any penal law or any law for the time being in force.
6)	I hereby declare that I have not been expelled or debarred from admission in any institution in the
0)	country on account of being found guilty of, abetting or being part of a conspiracy to promote,
	ragging; and further affirm that, in case the declaration is found to be untrue, I am aware that my
	admission is liable to be cancelled.
	admission is hable to be currened.
	Declared thisday of month ofyear.
	Signature of deponent
	Name:
	VERIFICATION
	ed that the contents of this affidavit are true to the best of my knowledge and no part of the
affidav	vit is false and nothing has been concealed or misstated therein.
* *	
Verifi	ed at <u>(place)</u> on this the <u>(day)</u> of <u>(month)</u> , <u>(year)</u> .
	Signature of deponent
	signature of deponent
Solem	anly affirmed and signed in my presence on this the <u>(day)</u> of <u>(month)</u> , <u>(year)</u> after
	g the contents of this affidavit.

OATH COMMISSIONER

AFFIDAVIT BY THE PARENT / GUARDIAN ____ (full name of I, Mr./Mrs./Ms. parent/guardian) father/mother/guardian of ______ (full name of student with admission / registration / enrolment number) s/o d/o, having been admitted to name of the institution) have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (hereinafter called the "Regulations"), carefully read and fully understood the provisions contained in the said Regulations. I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes 2) 3) I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against my ward in case he/she is found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging. 4) I hereby solemnly aver and undertake that My ward will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations. b) My ward will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations. I hereby affirm that, if found guilty of ragging, my ward is liable for punishment according to 5) clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against my ward under any penal law or any law for the time being in force. I hereby declare that my ward has not been expelled or debarred from admission in any 6) institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, the admission of my ward is liable to be cancelled. Declared this ___day of _____ month of _____year. Signature of deponent Name: Address: Telephone/Mobile No.: **VERIFICATION** Verified that the contents of this affidavit are true to the best of my knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein. Verified at (place) on this the (day) of (month), (year).

OATH COMMISSIONER

Signature of deponent

Solemnly affirmed and signed in my presence on this the (day) of (month), (year) after

reading the contents of this affidavit.

PEC University of Technology, Chandigarh

(A Deemed University under Section 3 of UGC Act,1956)

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