

## REGULATIONS FOR M. Tech (Research) PROGRAMMES W.E.F. 2007 – 08

### 1 PREAMBLE

- 1.1 The provisions in these regulations govern the conditions for imparting courses of instructions, conduction of examinations and evaluation of performance of students leading to M. Tech (Research) degrees. These courses will be offered to external or internal candidates who are engaged in their duties & earning. No financial assistance or hostel accommodation will be provided.
- 1.2 These regulations are effective for the batches of students admitted in the academic year 2007-2008 onwards.
- 1.3 The Programme leading to M. Tech (Research) is offered in the following Departments of the Institute:
  - a) Department of Civil Engineering
  - b) Department of Applied Mechanics
  - c) Department of Mechanical Engineering
  - d) Department of Electrical Engineering
  - e) Department of Electronics Engineering
  - f) Department of Computer Engineering
  - g) Department of Chemical Engineering
- 1.4 The provision of these Regulations shall be applicable to any new disciplines that are introduced from time to time and added to the list in section 1.3.
- 1.5 Notwithstanding any of the Clause(s) provided in the Regulations, the Senate shall exercise its powers to change/amend/interpret/implement decisions and actions concerned with academic matters.
- 1.6 The Board of Governors of the Institute may, on the recommendation of the Senate, change any or all parts of these Regulations at any time.

### 2 ADMISSION

#### 2.1 Student Status :

The status of all the candidates admitted to the M. Tech (Research) Programme shall be classified under any one of the following categories without any financial assistance.

- a) M. Tech (Research) candidates paid by Government / Semi-Government organizations / QIP.
- b) Sponsored candidates.
- c) Institute Faculty, Staff & Project Staff of the Institute.

- d) Faculty, Staff & Project Staff of the other Institute approved by AICTE /UGC.
- e) External candidates from any private / public sector organization or research laboratory / organization.

**Notes:**

- i. M. Tech (Research) candidates paid by Government/Semi-Government organizations such as CSIR, UGC, QIP, DAE, AICTE, etc. will receive their stipend and contingency grants from their respective supporting organizations.
- ii. Sponsored candidates are recipients of complete financial support including stipend, contingency grants and project expenses from the sponsoring organizations.
- iii. Faculty/Staff, Project Staff of this or other institute are expected to work for their M. Tech (Research) Programme while fulfilling their normal duties.
- iv. External candidates are allowed to carry out their Research work at the Institute or at their parent organization after fulfilling certain pre-requisites at the Institute and shall produce a relevant sponsorship or no objection certificate from the employer and submit it along with the application for admission.
- v. Self-financing candidates and Study leave candidates are expected to work as per the rules in the Institute.

2.2 Eligibility for Admission:

The eligibility for admission to M. Tech (Research) in Engineering Faculty and interdisciplinary areas is:

- (i) A candidate shall possess B.E or B. Tech Degree and should have passed with **First Class Division**.
- (ii) The candidate should have minimum working experience of FIVE years after graduation.
- (iii) Selection through oral presentation on the proposed area of research in front of a committee. The chosen guide should either be part of interview committee or be invitee member

2.3 The Senate shall approve the schedule of academic activities for the M. Tech (Research) Programme including the date of registration.

### 3 COURSE STRUCTURE

3.1 The complete M. Tech (Research) Programme will be of minimum 2 years duration for all the candidates. The maximum period allowed to complete the M. Tech (Research) programme is 4 years, provided the fees are paid for each extended year(s). The maximum or minimum period will be counted from the date of registration to the date of submission of dissertation. The candidate has to deposit the requisite fee for each extended duration.

3.2 Credits will be assigned to the M. Tech (Research) Programme as follows:

Semester	Nature of Course	Credit of Course	Remarks
I	(a) Self study Course I ( Theory) , <b>Code MR 610</b> (b) Self study Course II ( Theory), <b>code MR 620</b> (c) Seminar, <b>Code MR 630</b> <b>(on proposed research area)</b>	<b>05</b> <b>(100 marks)</b> <b>05</b> <b>(100 marks)</b> <b>05</b> <b>(100 marks)</b>	(i)Course I and Course II are Theory courses, can be taken from regular M Tech Programme or can be configured depending upon the requirement of research need. These courses will have comprehensive written end semester examination. (ii)The paper setting & assessment of the End semester examinations of comprehensive self study courses for each student shall be carried out by a panel of examiners consisting of (i) Guide(s) (ii) One examiner appointed by the Chairman, DBPGS&R (iii) The student will submit two copies of credit seminar report to the Guide(s) at any time in the semester in which registered. The student shall make oral presentation on his/her seminar topic as per time schedule decided by the Guide(s)in front of a panel of examiner consisting of (i) Guide(s) (ii) One examiner appointed by the Chairman, DBPGS&R
II	Dissertation Progress Seminar II <b>Code MR 640</b>	10 End Sem (300Marks)	(i)Dissertation Progress Seminar will have one evaluation at the end semester before registration of next semester. (ii)The examinations of Dissertation Progress Seminar will be taken by a committee consisting of Supervisors, one examiner from the relevant field and Chairman (out side department), both, are to be appointed by Chairman DBPGS&R

III	Dissertation Progress Seminar II <b>Code MR 810</b>	10 End Sem (300 Marks)	(i)Dissertation Progress Seminar will have one evaluation at the end semester before registration of next semester. (ii)The examinations of Dissertation Progress Seminar will be taken by a committee consisting of Supervisors, one examiner from the relevant field and Chairman(out side department), both, are to be appointed by Chairman DBPGS&R
IV	Dissertation <b>Code MR 820</b>	25 (450 marks)	(i) The submission of dissertation shall be allowed only after (i) successful completion of pre-synopsis seminar on the research work carried out by the candidate(s) and proof of communication of research papers atleast in refereed National journal. The committee for evaluation of pre-synopsis would consist of Supervisors, one examiner from the relevant field and Chairman (Out side department), both, are to be appointed by Chairman DBPGS&R. (III)The final dissertation examination shall be taken by a panel of examiner consists of Supervisors, one examiner from the relevant field and Chairman (out side department) appointed by Chairman DBPGS&R and an External examiner to be nominated by the Director.  (ii) The result will be declared only after acceptance or publication of full length paper atleast in referred National Journal ( <b>Mandatory</b> ).

3.3 The medium of instruction, examination, seminar and project reports will be English.

## **4 REGISTRATION**

- 4.1 Every student after consulting the Guide is required to register for a seminar & the approved Self Study Courses in respective Department at the commencement of 1<sup>st</sup> semester, and on the day fixed for such registration and notified in the Academic Calendar. Moreover, the students will have to register for each subsequent semester till submission of the dissertation.
- 4.2 Students who do not register on the day announced for the purpose may be permitted late registration up to the notified day in Academic Calendar on payment of a prescribed late fee. However, late registration is permitted up to maximum TWO weeks. A late fee of Rs.2000/- will be charged from the candidates afterwards and up to four weeks only. The candidates name will be deleted from the institute roll, if he/she is not getting registered within four week from the date of registration.
- 4.3 Only those students will be permitted to register in the next semester who have:
- a) Cleared all Institute, Library dues and fines (if any) of the previous semesters.
  - b) Paid all required advance payments of Institute (if any) for the current semester and
  - c) Not been debarred from registering on any specific ground.
- 4.4 The procedure for registration for M. Tech (Research) shall be as follows:
- a) The candidate shall obtain M. Tech (Research) Registration Forms (MRF) and application form for registration from the Academic Section after payment of the prescribed fees.
  - b) The entire M. Tech (Research) programme of the candidate shall be finalized by the respective department in accordance with Clause – 3.  
  
The M. Tech (Research) programme will include the self study courses, Credit Seminar, Dissertation Progress Seminars to be registered and delivered by the student and finally the dissertation in the last semester.
  - c) The Candidate shall fill in the MRF and Application Form for Registration in consultation with the Guide(s) and submit them to the respective DBPGS&R.
  - d) The BPGS&R shall approve the M. Tech (Research) programmes of all candidates after due scrutiny of recommendations received from DBPGS&R.

## 5 COURSE CREDIT REQUIREMENTS

5.1 All the students are required to register & earn credits as given in the Table of Clause – 3.

5.2 Total 60 credits are required for M. Tech (Research) Programme as per Clause – 3.

## 6 GRADING SYSTEM

6.1 Based on the performance of a student, each student is awarded final letter grade in each subject at the end of the semester. The letter grades and the corresponding grade points are as follows:

Grade	Grade Point	Description of Performance
AA	10	Outstanding
AB	9	Excellent
BB	8	Very Good
BC	7	Good
CC	6	Pass
FF	0	Failed
NA	-	Not Appeared

a) Description of Grades

### AA Grade

An 'AA' grade stands for outstanding achievement. The minimum marks for award of an 'AA' grade is 80 percent, however, individual course coordinators/guide(s) may set a higher marks requirement.

### CC Grade

The 'CC' grade stands for marginal performance, i.e. it is the minimum passing grade in any examinations. The minimum marks for award of 'CC' grade are 60 percent. A student is considered to have completed a subject successfully and earned the credits, if he/she secures a grade CC and above in that examination.

### FF Grade

A letter grade 'FF' in any subject implies a failure in that examination.

If a student fails to obtain passing 'CC' grade in End semester examination of comprehensive self study course, Credit seminar and dissertation Progress Seminar, he / she shall have to re-register for the courses subject to consent of supervisor. No candidate will register for next semester till he/she completes the previous semester successfully. No supplementary examination will be permitted under the course.

## **NA Grade**

Appearing at all the required examinations is compulsory for a student, unless exempted as per Clause. If a student fails to appear at the particular examination, he / she will be assigned 'NA' grade in the examination and has to re-register for the course with the consent of concerned supervisor.

### **6.2 Communications of Grades**

The panel of examiners of each student (Clause – 3) shall submit two copies of letter grades to the Head of the Department to which the subject belongs, by the due date specified in the Academic Calendar. The Head of the Department will forward, through DBPGS&R, all grades to the Academic Section by the due date specified in the Academic Calendar.

6.3 For the benefit of students and as a process of learning by the students, the answer books after corrections of End – semester examinations should be shown to the students as per the direction of the institute.

6.4 Any change of grade of a student in the examination, consequent upon detection of any genuine error or omission on part of the concerned examiner(s), must be sent by the concerned examiner(s) through the concerned H.O.D. to the DBPGS&R within 1 week of publication of End – semester results. If approved, the Chairman-DBPGS&R should forward the same to the Academic Section duly incorporating the necessary changes in the grade.

6.5 The Grade Report shall contain the Letter Grade for each course, SGPA and CGPA.

### **6.6 Credit Seminar**

The student will submit two copies of credit seminar report to the Guide(s) at any time in the semester in which he/she registered. The student shall make oral presentation on his/her seminar topic as per time schedule decided by the Guide(s). The seminar will be assessed, during his presentation, by the committee enumerated in Clause-3.

The credit seminar/ Dissertation Progress Seminar assessment will be initially made in terms of marks with 40 percent weightage on the credit seminar report evaluated by the Guide. The oral presentation and the response of the student in the discussion will be given 60 percent weightage which will be awarded by the examiners & chairman. On completion of assessment, compilation of the marks given on the report and the presentation, the chairman will convert the marks into grades and forward the same to the Academic Section.

If a student does not submit the credit Seminar report/Dissertation Progress Seminar report and/or present the Seminar on the scheduled date, 'FF' Grade will be awarded unless the DBPGS&R extends the date in exceptional circumstances. The performance of a student is evaluated in terms of two indices, viz. the Semester Grade Point Average (SGPA) which is the Grade Point Average for a semester and Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters, at any point of time.

The **SGPA** is calculated on the basis of grades obtained in the examination of semester registered.

$$SGPA = \frac{\sum_{sem} (Earned\ Credit \times Grade\ point)}{\sum_{sem} (Course\ Credit\ in\ Semester)}$$

The **CGPA** is calculated on the basis of all pass grades obtained in examinations of all completed semesters.

$$CGPA = \frac{\sum_{\substack{All\ Sems. \\ Completed}} (Course\ Credit \times Grade\ Point) \text{ in passed courses}}{\sum_{\substack{All\ Sems. \\ Completed}} (Course\ Credit) \text{ in passed courses}}$$

Both SGPA and CGPA will be rounded off to second place of decimal and recorded as such.

## 7 ASSESSMENT OF M. Tech (Research) WORK PERFORMANCE

- 7.1 There will be assessment of a student's performance throughout the semester and Grades will be awarded by the Guide concerned or the appropriate committee appointed for the purpose as mentioned in Clause -3.
- 7.2 The minimum CGPA for Course Work and Seminar is 6.0 to be eligible to continue the M. Tech (Research) Programme and thereafter the confirmation of Registration shall be done.

## 8 WITHHOLDING OF GRADES

Grades shall be withheld when the student has not paid his dues or when there is a disciplinary action pending against him.

## 9 GUIDE

- 9.1 a) All selected candidates shall be assigned one or two Guide(s) from the Institute at the time of selection. The other guide may be from the place of work of the candidate(s).
- b) The M. Tech (Research) programme and the title of the research topic of a selected *candidate* shall be finalized by the Guide(s) after mutual discussion.
- 9.3 a) Change of Guide(s) under exceptional circumstances shall be permitted on recommendation of the DBPGS&R after obtaining the consent of (i) the candidate (ii) the present Guide(s) and (iii) the proposed Guide(s).
- b) If the M. Tech (Research) programme and/or area of the work require modification due to this change, the candidates' entire course programme requirement shall be examined by the DBPGS&R. If there is a change in the M. Tech (Research) programme and/or title of the work, the registration date shall be revised, if found necessary.
- 9.4 a) Before the departure, whenever a Guide leaves the Institute permanently or temporarily for a period exceeding one year, the DBPGS&R shall appoint new Guide(s) for the students. This is not applicable for candidate having more than one Guide from the institute.
- b) Whenever a Guide leaves the Institute temporarily for a period less than one year the DBPGS&R shall make alternate arrangement, if necessary, for the guidance of the students.
- c) The DBPGS&R may consider continuation of the original Guide, when returns, to the Institute, as Co-Guide of the students depending on the period for which he has supervised their M. Tech (Research) programmes.
- d) Any such arrangements made shall be forwarded to the BPGS&R for approval.
- 9.5.1 There is no restriction on the number of M. Tech (Research) student registered with a Guide at any given time.
- 9.6 Eligibility for Guide
- a) A faculty member appointed against permanent post at SVNIT possessing M.E or M. Tech & / or Ph.D. shall be recognized as a Guide.
- b) In all cases for M. Tech (Research) registration, one of the Guide(s) shall be compulsorily from the department.

- c) In case of Interdisciplinary areas, at least one Guide(s) must belong to the discipline in which the student is registered. It is mandatory to have one of the guides from parent department.
- d) In case the student intends to take a guide from his work place, the selected guide should be the competent person(s) holding M.E. / M. tech / Ph. D. degree in the respective discipline and get recognized by DBPGS&R in the first semester.

## **10 PLACE OF WORK, PROGRESS AND DURATION**

On the recommendations of the Guide(s) and DBPGS&R the Institute may allow the Research work for the M. Tech (Research) degree to be partially or wholly carried out at another organization duly approved for the purpose by the Institute for the students concerned.

The DBPGS&R shall examine the details given by the candidate on application form and may decide either to ask for further information, if necessary, or even collect first hand information, if necessary, by deputing faculty member(s) to visit the organization. Only, when the DBPGS&R is fully convinced about the adequacy of the Research facilities, it shall recommend the case to the BPGS&R for admission of the candidate.

- 10.1
- a) The departmental MRPC shall evaluate the progress of M. Tech (Research) work of the student and upon their satisfaction shall recommend continuation of his work. The departmental MRPC shall submit their evaluation report in the prescribed format, through the Chairman DBPGS&R to the Academic section after Dean (PG) endorses.
  - b) If the MRPC is not satisfied with the progress of research work may recommend termination of registration to the Senate/SEC through the BPGS&R. The MRPC shall comprise of the following members.
    - (i) Concerned Guide(s).
    - (ii) One faculty member nominated jointly by his Guide(s) & Chairman DBPGSR from the concerned department or other department who is familiar with the concerned area of research work.
    - (iii) One faculty member from the other department as the chairman of MRPC to be nominated by the Chairman DBPGSR
  - d) The formation of MRPC for each student shall be completed by the chairman DBGPSR immediately after completion of minimum credit requirements of First Semester and intimated to the Dy. Registrar (Acad.) through Dean (PG) for the record.
  - e) The members of MRPC will be changed under extra ordinary circumstances in consultation with the Dean (PG).

- 10.3 All the candidates have to carry out M. Tech (Research) work in the Institute or in other recognized places for at least a period of two years from the date of registration before submission of dissertation. The above duration is inclusive of the Course Work and Seminar.  
The period of validity of M. Tech (Research) registration is four years. The candidates may submit their dissertation before the end of this period subject to the provisions of 11.1, 11.2 & 11.3 (Any candidate who concurrently registers for any postgraduate degree at another organization shall be automatically de-registered at the Institute).

## 11 DISSERTATION EVALUATION:

- 11.1 Prior to the submission of the synopsis of the dissertation, a comprehensive internal assessment of the Research work should be made by a panel as enumerated in Clause-3.
- a) This assessment will be through a pre-synopsis seminar. The candidate can submit the synopsis only if the panel is satisfied about the quality of the work for submission as a M. Tech (Research) dissertation.
  - b) Details of the pre-synopsis seminar shall be adequately notified so as to enable interested staff members and students to attend the same.
  - c) The Chairman of the 'panel' shall forward the panel's report to the Dy. Registrar through the Dean (PG) for Office record for the Academic section.
- 11.2 a) The candidate shall submit ten copies of the synopsis of the work at least two months before submission of dissertation through the Dean (PG) to the Academic section with the following certificates:
- i. Certificate from the Chairman, DBPGS&R that the prescribed course credits is completed.
  - ii. Copy of report from the Chairman of the panel of examiners for pre-synopsis seminar.
  - iii. Certificate that the pre-synopsis seminar has been completed satisfactorily.
  - iv. Certificate from the Research Guide(s) stating:
    - a. That there is a *prima facie* case for consideration of the dissertation including the mandatory publication requirement i.e. proof of communication of research paper/s.

b. That the dissertation does not contain any work which has been previously submitted for the award or any degree, and

c. The extent of collaboration, if any,

b) "No dues Certificate" from all Sections, Hostel and Library that there are no arrears/dues up to the date of submission of dissertation.

11.3 a) The M. Tech dissertation shall be written in English in the approved format.

b) The candidate shall submit four copies of the dissertation to the Academic Section within the prescribed time limit, namely, not earlier than two months after approval of Synopsis and not later than the limit specified in clause 10.3.

c) Along with the dissertation, the candidate shall submit the requisite forms containing the authorization from the Guide(s) for submission of the dissertation and a certificate from Accounts Section that there are no dues against the candidate.

11.4 a) Immediately after satisfactory completion of pre-synopsis seminar, Guide(s) will submit the proposed list of external referees to the HOD/Chairman DBPGS&R. The list should be consisting of six members from India only. The HOD/Chairman DBPGS&R upon satisfaction shall forward the same to the Dean (PG).The Dean (PG) upon satisfaction shall forward it to the Director as the Senate Chairman for choosing one external referee.

b) The referee shall independently report to the Dean (PG) of the Institute, preferably within four weeks from the date of the receipt of the dissertation. The Dean (PG) should convey to the referee that following information should be included in assessment report

i. a critical survey and evaluation of the quality and quantity of the work as embodied in the dissertation.

ii. Questions, if any, to be asked or points to be clarified at the viva-voce examination, and

iii. A definite recommendation as to whether the dissertation is acceptable for the award of the degree of M. Tech (Research).

c) If a referee in the report is not in a position to make a definite recommendation for the award of the degree, guide should be requested to get it corrected/implemented from the candidate as follows:

- i. Substantial revisions involving rewriting of one or more chapters without, however, doing any further Research work.
  - ii. Completely rewrite the dissertation, if the dissertation in the present form requires major improvement in quality and quantity of work to be carried out by the candidate and he/she has been given an opportunity for further Research work and/or reinterpretation of results within specified limit in Clause 10.3.
- d) The copy of the referee's report when received shall be confidentially made available to the Guide(s). The Guide(s) shall send comments to Dean (PG) on these reports.
- e) Dean (PG) will submit the referee's reports and Guide's comments to evaluation committee comprising of Dean (PG) as Chairman, one recognized Guide (other than the Guide(s) of the concerned students) from the department and one recognized Guide from other department. Such committee should be constituted by Dean (PG) in consultation with the Chairman of the Senate in each case. This committee will recommend to the BPGS&R whether the dissertation be accepted for the viva-voce examination or be rejected or be referred again to a new referee after due corrections.
- f) A dissertation may be considered acceptable for holding the viva-voce examination if the referee give positive recommendations. If the dissertation is rejected, as it is, it shall be referred to a second referee chosen from the panel of examiners by the Chairman, Senate.
- g) Whenever a dissertation is referred to a second referee, the comments of the Guide point by point for the queries by the first referee, reported to the evaluation committee as specified in clause 11.4 (e), should be also sent to second referee.
- h) The Senate shall be the final authority in conferring the degree to the candidate.
- 11.5 a) If the referee recommends acceptance of the dissertation subject to minor modifications only, the dissertation can be resubmitted only once after incorporating the modifications, within a period of three months. The dissertation so resubmitted shall be examined by the same referee.
- b) A dissertation rejected by the referee may be re-submitted to second referee after revision, not earlier than one semester and not later than two semesters from the date of such intimation to the candidate by the BPGS&R.
- c) Rejection of the dissertation so re-submitted will disqualify the candidate from further consideration for the award of the M. Tech (Research) degree, in the topic of research chosen.

11.6a) A candidate, whose dissertation has been accepted for the award of the M. Tech (Research) degree, shall be required to defend the work at an open viva-voce examination conducted by a Board of Examiners at the Institute as enumerated in Clause-3.

b) The Board of Examiners shall submit its report in the prescribed form to the Dean(PG) within 3 days after completion of viva-voce exam.

11.7 a) After satisfactory completion of the viva-voce examination, the M. Tech (Research) degree may be conferred upon the candidate after approval by the Senate.

b) If a dissertation has been accepted but the candidate fails at the viva-voce examination, he may be permitted by the Chairman, Senate to re-appear for viva-voce examination again at a later date. The Recommendations of the Board of Examiners conducting the viva-voce examination shall be considered in taking a decision in this respect.

c) After successful completion of the viva-voce examination, the candidate shall submit to the Academic Section two copies of the approved dissertation duly bound together with the application for submission of the same in the prescribed format.

## **12 WITHDRAWAL FROM THE INSTITUTE**

a) If a student withdraws from his M. Tech (Research) Programme within the first Semester after admission, his student status ceases and he would not be re-admitted with any weightage for the credits acquired.

b) The student will lose the student status if leaves, in any case the programme any time without prior permission of the Institute.

## **13 CONDUCT AND DISCIPLINE**

13.1 Students shall conduct themselves within and outside the premises of the Institute in a manner befitting the students of an Institution of National Importance.

13.2 As per the order of the Hon'ble Supreme Court of India, ragging in any form is banned; acts of ragging will be considered as gross indiscipline and will be severely dealt with.

13.3 The following acts of omission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures:

a) Ragging

- b) Lack of courtesy and decorum; indecent behavior anywhere within or outside the campus.
- c) Willful damage or stealthy removal of any property/belongings of the Institute/Hostel or of fellow students/citizens.
- d) Possession, consumption or distribution of alcoholic drinks or any kind of hallucinogenic drugs at the campus.
- e) Mutilation or unauthorized possession of library books.
- f) Noisy and unseemly behavior, disturbing studies of fellow students.
- g) Hacking in computer systems (such as entering other person's area without prior permission, manipulation and/or damage of computer hardware and software or any other cyber crime etc.)
- h) Any other act of gross indiscipline.

Commensurate with the gravity of the offence, the punishment may be:

Reprimand, fine, debarment from an examination, rustication for a specified period or even outright expulsion from the Institute.

- 13.4 For an offence committed in (a) a hostel (b) a department or in a classroom and (c) elsewhere, the Chief Warden, the Head of the Department and the Dean (Student Affairs), respectively, shall have the authority to reprimand or impose fine.

All cases involving punishment other than reprimand shall be reported to the Chairman, Students Disciplinary Committee constituted by the Director.

- 13.5 Cases of adoption of unfair means in an examination/malpractice shall be reported to the Dean (Examination) for taking appropriate action.

#### **14 M. Tech (Research) REQUIREMENTS & CONVOCATION**

- 14.1 A student shall be declared eligible for award of M. Tech (Research) Degree if he / she has:
- a) Completed all the Course Work and Seminar requirement for the degree with CC or higher grade in each of the subjects, seminars and dissertation.
  - (b) Obtained the minimum CGPA requirement of 6.0 at the end of Course Work and Seminars.

- (c) M. Tech (Research) work has been carried out within / outside the Institute under the guidance of Guide(s) for at least two years ( maximum four years)after the date of registration. The above period includes Course work and Seminars.
- (d) The candidate's one paper has been accepted or published in refereed National or International journal.
- (e) The dissertation submitted by the candidate has been recommended for the award of the M. Tech (Research) degree by one external referee and the guide(s) and by the Board of Examiners (BOE) constituted for the viva-voce examination.
- (f) Defended the M. Tech (Research) work at an open viva-voce examination conducted by the BOE.

14.2 The award of M. Tech (Research) degree must be recommended by the Senate.

#### 14.3 Convocation

The Annual Convocation shall be conducted usually in the month of October. The M. Tech (Research) Degrees will be awarded in person for the students who have graduated during the current academic year. The Degrees will be awarded in absentia to such students who are unable to attend the Convocation. The students are required to apply separately for the Convocation along with the prescribed fee.