

Summary of the Senate Recommendations during August 2014 to July 2016

1. Selection and Admission (*approved on May 24, 2016*)

- *Minimum Qualification for admission*

- (a) Candidates with ME/ M Tech or equivalent qualification can be invited for PhD interviews in both the Science and Engineering faculties, *even if they have not qualified in GATE earlier*. However, GATE qualification is *desirable*. Each department may use a suitable cut-off to invite candidates for PhD interviews.
- (b) Candidates graduating with a BE/BTech from *centrally funded technical institutions* may be invited for research interviews, even if they are not GATE qualified, provided they have a minimum CGPA of 8.5 out of 10 or its equivalent, at the end of their
 - i. seventh semester, in case of candidates who are in their 8th semester of BE/B Tech, or the
 - ii. eighth semester in case of students who have already obtained the BE/B Tech qualification.

- *Increase in Intake for Int PhD (approved on Nov 23, 2015)*

- (a) Under each stream of the Int PhD program up to 18 students will be admitted from the academic year starting in August 2017.
- (b) Candidates will be invited for interviews based on their JAM/JEST rankings. In all the Int. PhD streams (i.e., Physics, Chemistry, Mathematics, and Biology) students will be selected based on interviews.

- *Application form and Fee Structure (Approved on May 24, 2016)*

- (a) The following *terms and conditions* will be added in the application form for ERP candidates.
 - i. Organization guide must attend the comprehensive examination, oral examination, and any other student evaluation meeting set up by the Institute administration.
 - ii. The organization must provide sufficient time for the candidate to carry out his/her thesis work. Hence, after successful completion of the RTP, the candidate must be permitted to be on leave for an average of one day a week, in order to effectively spend time on his/her PhD work.
 - iii. Travel expenses of the organization supervisor to attend various meetings conducted at the Institute, in connection with the evaluation and progress monitoring of the student, must be supported by the organization.
 - iv. The registration of the student will be canceled, if the student fails to submit his/her periodic progress report more than twice during the registration period.

- (b) *Annual Tuition Fee to be paid by ERP Students from various Organizations with effect from August 2017*

Type of Organization	Tuition Fees in Indian Rupees
Educational Institutions	50,000
Government Organizations	1,00,000
Private Organizations	1,50,000

2. 10-Point Grading System (*Approved on June 14, 2016*)

- (a) *Existing 8-Point Scale (Applicable to students admitted before July 2016)*

Grade	Qualitative Assessment	Grade Points
S	Outstanding	8
A	Excellent	7
B	Very Good	6
C	Good	5
D	Satisfactory	4
F	Fail	0

- (b) *10-Point Scale (Applicable to students joining from August 2016)*

Grade	A ⁺	A	B ⁺	B	C	D	F
Grade Points	10	9	8	7	6	5	0

3. Research Training Program (RTP)

- (a) **Course Work and Duration**

- i. *RTP and non-RTP courses (Approved on Dec 1, 2014)*

During registration for courses, the Master card must clearly indicate if a course being taken is an RTP course or a non-RTP course. It is not possible to modify the choice subsequently during the semester. The non-RTP courses in which the student obtains at least a C grade will be listed separately in the transcript. Non-RTP courses may be taken for credit even after the comprehensive examination.

- ii. *Scrutiny of the answer scripts of the final examination in a course by the student (Approved on Feb 10, 2015)*

A student can go through his/her corrected answer script with respect to courses offered during August-December term before the 14th January of the next calendar year, and similarly for courses offered during the January-April term, the student can go through his/her corrected answer script before 25th May. If a change in the grade is warranted as a consequence of the scrutiny by the student, then it should be reported to Chairman, SCC for incorporating the change.

iii. *Duration (Approved on May 24, 2016 for Int PhD)*

M Tech(Res) students must complete their RTP in one year; PhD students have to complete in one year and six months; direct PhD students, *i.e.*, those who join the PhD program directly after a BE/BTech degree, can take at most two years and Int PhD students have to complete within two years and six months.

(b) **Number of credits to be Successfully Completed** (*Approved on June 14, 2016*)

Program	8-Point Scale (for students admitted before July 2016)	10-Point Scale[®] (for students joining from July 2016)
PhD	Science- Min 12 Credits, Min CGPA 5.5 Engg.- Min 6 Credits, Min CGPA 5.5 (basket rule applies)	Science- Min 12 Credits, Min CGPA 7 Engg.- Min 12 Credits, Min CGPA 7 (basket rule applies)
Int PhD (64 Credits)	First Term Min CGPA of 5 Subsequent terms Min CGPA of 5.5 (No basket rule)	First Year Min CGPA of 7 Subsequent terms Min CGPA of 7 (No basket rule)
Dir PhD (Engg.)	Min 18* Credits, Min CGPA 5.5 (basket rule applies)	Min 24 [#] Credits, Min CGPA 7 (basket rule applies)
MSc(Engg)	Min 12 Credits, Min CGPA 5.5 (basket rule applies) Continuation to PhD if CGPA is at least 6.5; Special cases 6 CGPA (all RTP courses are considered)	–
<i>MTech(Res)</i> [§]	–	Min 12 Credits, Min CGPA 7 (basket rule applies) Continuation to PhD if CGPA is at least 8 (all RTP courses are considered)

® The *Maximum* number of credits is 9 more than the *Minimum* number in all the cases.

* Students get PhD degree if they complete 18 credits with CGPA of at least 5.5.

If they complete at least 21 credits under RTP with a Min CGPA of 5.5 then they get M Tech (Res) degree also along with PhD on successful completion of PhD.

Students get M Tech (Res) degree along with PhD on successful completion of PhD.

Possible for a student to get downgraded and get M Tech (Res) but not PhD.

In such a case completion of a minimum of 12 credits with a minimum CGPA of 7 is required.

§ MSc (Engg) is relabeled as M Tech (Res) and there will not be any admissions

to MSc(Engg) from July 2016. (*Approved § on May 19, 2015; ®, *, # on Nov 23, 2015*)

4. Comprehensive Examination/General Test

(a) In a comprehensive examination the candidate will be tested on both the syllabus and

research work carried out thus far. (*Approved on May 24, 2016*)

- (b) There is *no General Test* for MTech (Res) students. (*Approved on May 24, 2016*)
- (c) The *syllabus for the comprehensive examination* must comprise material from *at least 3 courses*. The syllabus should be drawn up so as to test the *breadth of the subject* as reflected in the course outline in the *Scheme of Instruction* book. (*Approved on Feb 22, 2016*)
- (d) If an Int PhD student decides to take the MS option before the comprehensive examination, then there is no need to conduct the comprehensive examination in his/her case. (*Approved on May 24, 2016*)

5. **Periodic Evaluation** (*Approved on Feb 10, 2015*)

Every PhD student needs to be evaluated to monitor his/her progress before the end of the academic year, preferably at the time of scholarship renewal. During the first two years, the progress is monitored based on the performance in the RTP and during the comprehensive examination. Subsequently,

- (a) Evaluation needs to be done at the end of 3rd, 4th, and 5th years to monitor the progress.
- (b) Scholarship renewal form is modified and the modified version is circulated to all the departments. It is designed so that the supervisor, and/or the Department Curriculum Committee, and the Chairperson are involved in setting up a committee, if required, to monitor the progress of the student.

6. **Revocation of Cancellation** (*Approved on May 24, 2016*)

- (a) *Cancellation of registration*
Academic section will issue a letter to the Department, Hostel, and Mess offices.
- (b) *Upper Bound on the Duration*
For each research degree, there is a period of registration beyond which the registration is automatically canceled. Under some circumstances the cancellation can be revoked. The following table shows the maximum period after registration, beyond which the cancellation of registration cannot be revoked. Additional time, beyond the maximum period, may be given to students to address any other contingencies like the student going on maternity leave or the student or one of his/her close family members falling sick during

the Registration period of his/her Research Program.

Program	Cancellation after	Revocation by Deans	Revocation by <i>Director</i> *
M Tech (Res)	2Y 6M	2Y 6M - 3Y	3Y - 4Y
Int PhD	8Y	8Y-9Y	9Y - 10Y
PhD (Engg) (with MTech)	6Y	6Y - 7Y	7Y - 8Y
PhD (Engg) (with BTech)	6Y	6Y - 7Y	7Y - 8Y
PhD (Sci)	6Y	6Y - 7Y	7Y - 8Y

* A committee will be formed with the supervisor as the convener if the Director permits revocation for *PhD* 3 additional members with at least 2 from outside the candidate's department for *MTech(Res)* 2 additional members with at least 1 from outside the candidate's department

7. Thesis Submission and Evaluation (*Approved on May 24, 2016*)

(a) *PhD thesis submission after the colloquium*

The thesis needs to be submitted within 6 months from the date on which colloquium is completed.

(b) *Choice of Examiners for M Tech (Res)*

An M Tech (Res) thesis may be evaluated by an expert from anywhere in India, including from within the candidate's own department. The list of examiners will be approved by the DCC and the Chairperson of the department.

(c) *Submission without a guide*

It is possible for a student to submit his/her thesis without a guide. A committee will be set up by the Deans, based on the request of the student, in consultation with the Chairperson of the department.

8. Thesis Defense (*Approved on May 24, 2016*)

(a) *Revised Check-Sheet*

Recommendation on the revised check-sheet are:

1. I recommend acceptance of the thesis in its present form.
2. I recommend acceptance of the thesis. I would, however, like the candidate to furnish satisfactory clarifications to my queries during the thesis defense, and incorporate corrections indicated in the report, but the corrected thesis need not be sent back to me.
3. I have some queries. Before I send my recommendation, I want the candidate to respond in writing.
4. I am not able to make my recommendation at this stage. I have several comments and queries. Before I send my recommendation, I want the thesis to be revised and sent back.

5. I do not recommend acceptance of this thesis for the reasons set out in detail in my report.

(b) *A Full Report Case*

The thesis supervisor *cannot select options 4 or 5*. If any of the other examiners selects either option 4 or option 5, the full thesis reports of all the examiners will have to be placed before the Senate for possible discussion.

(c) *When to conduct the Defence?*

Within 3 months after receiving the last report. Either the student or the Indian examiner can participate over video conference provided each of the examiners has recommended, on the check-sheet, either option 1 or option 2. The defence has to be conducted on working days of the Institute.

9. **Consolidated Recommendation** (*Council Resolution*)

(a) *Main contributions made by the Candidate*

The report on the contributions made by the candidate and reported in the thesis must be detailed. It should have at least 200 words for a PhD and at least 100 words for an MTech (Res) recommendation.

(b) *Summary of the referees' comments*

A detailed summary of referees reports should be provided which reflects the constructive/critical nature of each of the reports.

10. **Hostel Accommodation** (*Approved on Nov 23, 2015*)

Maximum possible duration of stay in the hostels is summarized in the table below.

Program	Maximum Duration of stay from the Date of Admission
PhD- Science	6 Years
PhD-Engineering	6 Years
Int PhD	8 Years
MSc(Engg)/ M Tech (Res)	3 Years

11. **Scholarship for Research Programs** (*Approved on May 24, 2016*)

Program	Scholarship	Financial Assistance
M Tech(Res)	for 2 Years	2Y-2Y 6M
PhD(Engg.)	for 5 Years	5Y-6Y
PhD(Sci)	for 5 Years	5Y-6Y
Int PhD	for 7 Years	7Y-8Y

12. **Research Associateship** (*Approved on Nov 23, 2015*)

<i>Program[#]</i>	Eligible if PhD thesis is submitted within
PhD (Sci)	5 Years
Int PhD	7 Years
PhD (Engg.) (with MTech)	4 Years 6 Months
Dir PhD(Engg.) (with BTech)	5 Years

RAship is available for at most 12 months for all the PhD programs. The student's advisor will be encouraged to pay the RAship amount.

13. **GARP Funding to Support Conference Travel** (*Approved on Nov 23, 2015*)

- (a) Research students are eligible to get GARP funding for presenting a paper in a conference held within or outside India.
- (b) The maximum amount available per student is Rs 100,000.
- (c) A student can utilize this amount for one or two conferences.
- (d) GARP funds are not available to those PhD students who have completed 6 years. Int PhD students are not eligible to get the support after completing 8 years.

14. **Masters Programs**

- (a) All the ME Programs are relabeled as M Tech Programs from the Academic Year starting in August 2016. (*Approved on May 19, 2015*)
- (b) The minimum Pass Grade for Masters project in Engineering is *D*. (*Approved on Dec 1, 2014*)
- (c) *Internships for Masters Students* (*Approved on May 24, 2016*)
 - i. A Masters student can spend up to a maximum period of 3 months as an intern in the industry.
 - ii. A Masters student can work as an intern during the summer of the first year. The student will not get scholarship from the Institute during this period, in case he/she gets financial support from the organization.
 - iii. A Masters student may work for his project, in collaboration with an organization, on a problem specified under an MOU between IISc and the organization. In such a case, the student can spend at most 3 months in the industry to carry out his/ her M Tech project work. The resulting Intellectual Property will be shared as per the Institute norms.

(d) *Medals for Masters Students in the Engineering Faculty (Approved on Dec 1, 2014)*

Best student of every Masters program will be awarded a Medal. It will be awarded to the M Tech/ME/M Des/M Mgmt student of the program who gets the highest CGPA (excluding project work) among all the candidates who have secured the minimum of an A grade in the project.

(e) *Medals for MS students (Int PhD program) (Approved on Dec 1, 2014)*

For students of the Int.PhD program after two-years of study in the Division of Biological/ Chemical/ Mathematical/ Physical sciences a medal is awarded to a student in each division. The student who has obtained the highest CGPA at the end of the second year of study with minimum of 64 credits of course work and who has passed the comprehensive examination, in the Int PhD program will qualify.

15. **Masters Programs under the 10-Point Grading System** (*Approved on June 14, 2016*)

Program	Existing Norms: 8-Point Scale (for students admitted before July 2016)	10-Points scale (for students joining from July 2016)
MTech/ME M Des M Mgmt (64 Credits)	First term a min TGPA of 3.5 Subsequent terms Min CGPA of 4 Conversion/Continuation to PhD: Min 32 Credits, Min CGPA 6.5 Distinction:Min CGPA of 7 and Project grade of S or A	First term Min TGPA of 4 Subsequent terms Min CGPA of 5 Conversion/Continuation to PhD: Min 32 Credits, Min CGPA 8 Min CGPA of 8.5 and Project grade of A ⁺ or A

16. **Institute Medals** (*Approved on Sept 3, 2015*)

- (a) The Institute will award medals named as *Institute Medals* for all the UG programs. When donations are received for these medals, these medals will be changed to named medals.
- (b) The minimum corpus amount for constituting a medal is Rs. 5,00,000.
- (c) No medal will be awarded when the number of theses considered for the medal is less than five (*Approved on Nov 23, 2015*).

17. **Copyright Ownership of Thesis Work** (*Approved on Nov 23, 2015*)

Copyright of the material reported in the thesis rests with the student. However, if the thesis is published as a book, the advisor also can be a co-author. Further, the student needs to acknowledge the support of the Institute. Further,

- (a) Even though copyright has been transferred to a journal/ conference proceedings publisher, the authors of the paper can exploit the work for academic purposes. So, if the student has publications out of his/her research work, there is no problem in including the material in the papers in his/her thesis.
- (b) Any part of the thesis can be patented only according to the IP policy of the Institute and the resulting IP will be shared as per the Institute norms.