Academic Requirements for the Postgraduate Programs
(Effective from Autumn 2014-15)

All postgraduate programs of DA-IICT will be governed by these rules, subject to amendments, from time to time, as per the needs and requirements. These rules deal only with the post-admission academic activities of these programs. Eligibility for admission, admission procedures etc for these programs are outside the purview of this document.

Currently, the Institute runs the following postgraduate programs:

1. Master of Technology (Information and Communication Technology): M Tech (ICT): duration- 2 years
2. Master of Science (Information Technology): M Sc (IT): duration- 2 years
4. Doctor of Philosophy: Ph D: duration- typically 3 to 5 years.

The Dean (Academic Programs)/Registrar may, from time to time, issue such instructions or directions as may be necessary to give effect to and carry out the provisions of these rules. Director, as chairman of the Academic Council, may relax/exempt some provision(s) of the rules in exceptional situations and all such cases shall be reported to the Academic Council in the immediate next meeting.

Important terms/expressions used in the document have been defined in the GLOSSARY at the end of this document.

1. REGISTRATION

1.1 Categories of Registration:

a) A student may register in a given semester in two possible categories: resident registration and external registration. Only resident registration will count towards the residence requirement for a degree. A foreign student on student visa will not be allowed to register as an external student.

b) To qualify for resident registration, the student must register for a duly approved course programme and pay the prescribed tuition and other fees, including any outstanding dues.

c) To qualify for external registration, a student must register for a duly approved research programme, and pay the prescribed registration fees, with the provision that the PG Committee may permit/require registration for coursework also. However, this qualification is subject to the proviso that a regular M Tech student may not avail of external registration for the purpose of obtaining an ‘S’ grade for thesis work, as detailed in Section 2.5(e).
d) A PhD student is not required to register in the semester in which the final PhD thesis is submitted for evaluation.

e) A PhD student who holds an M Tech or M.Phil or an equivalent post-graduate degree should complete six semesters of residency (attending campus regularly and going through the attendance verification system) and those who holds a B.Tech or M.Sc or an equivalent degree should complete eight semesters of residency.

f) A PhD student, irrespective of his/her registration as full time or external (after the residency requirement) is required to pay the prescribed semester tuition fee and registration fee.

1.2 New entrants to the postgraduate programs, who are awaiting the results of the qualifying examination may be allowed “provisional” registration. Latest by the date given in the academic calendar (usually about 8 weeks from the date of registration) such candidates will be required to submit, for verification, the certificates of having passed the qualifying examination. Original certificates will be returned to the students and a copy will be kept for records.

1.3 Late Registration:

a) If for any compelling reason like illness, a student is unable to register on the day of registration, he/she will be allowed to register during the late registration period as specified in the academic calendar (which is about one week from the date of registration). Any student registering late will be required to pay the specified late registration fee.

b) In exceptional cases, the Dean (Academic Programs) on the recommendation of the Postgraduate Committee (PGC) may consider registration beyond the date of late registration. In such a case, the student will be allowed to register for thesis credits only.

1.4 Academic Advising:

a) A student will be advised in the selection of courses by the faculty adviser appointed by Dean (Academic Programs) in consultation with the PGC. For M Tech students, thesis supervisors will be assigned after one semester of course work. Ph D candidates will be assigned a thesis supervisor after passing the comprehensive examination (details given in section 4).

b) A student may be permitted to repeat or substitute courses in which he/she has obtained DD, DE or F grades. Permission to repeat/substitute a course will be governed by the guidelines laid down in section 2.5.

1.5 Semester Load Requirements:

a) For M Tech and Ph D Students:

A semester load is defined as equivalent of 12 credits. A student registered for a full semester load solely by course work would typically take 4 courses. Depending on the merits of the case, the PGC may permit a student to register for a maximum of 15 credits or a minimum of 9 credits.

b) For M Sc (IT) and M Sc (ICT in ARD) and M Des students:

Semester load will be as prescribed from time to time in the approved program course structure document.

c) A student in the external registration program, when registering for research only, can register for a maximum of 12 credits or a minimum of 3 credits during the regular semester.
1.6 Adding/Dropping of Courses and Withdrawal from a Semester

a) Adding and dropping of courses is permitted, during the Add/Drop period, only if the student's request is endorsed by the instructor of the course and the Convener PGC. The last dates of applying for adding and dropping of courses are specified in the academic calendar.

b) A student who wishes to withdraw prior to registration for a semester must obtain a formal approval from the Dean (Academic Programs) before the prescribed last date for late registration for the concerned semester. Withdrawal after registration for a semester is permitted only on medical grounds or for other exceptional reasons and formal approval for such withdrawal must be obtained from the Dean (Academic Programs) before the date of commencement of the end-semester examination for the concerned semester. Withdrawal from a semester, either prior to registration or after registration, is permitted for only one semester at a time. If a student does not register for a regular semester or does not withdraw with permission from the Dean (Academic Programs) as indicated above, his/her name is liable to be struck off from the rolls of the Institute.

c) A student who registers for a semester after having withdrawn in previous semester(s) can register for the available courses as prescribed in the curriculum for that particular semester subject to pre-requisites, if any.

d) The transcript of a student who has “withdrawn” status would show the appropriate status for the concerned semester(s). The transcript of a student who is suspended for an academic or disciplinary reason would also show “withdrawn” status.

e) The maximum period for completion of any postgraduate program as given in the appropriate subsection of Section 2 includes any semester in which the student has “withdrawn” status.

2. ACADEMIC REQUIREMENTS

2.1 Ph D Program:

<table>
<thead>
<tr>
<th>Program</th>
<th>Min Total Credits</th>
<th>Min Course Credits</th>
<th>Min Research Credits</th>
<th>Min No. of Courses</th>
<th>Min Residence (sems)</th>
<th>Max Duration (yrs)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph D – after B Tech / M Sc</td>
<td>96</td>
<td>36</td>
<td>48</td>
<td>12</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Ph D – after M Tech / M Phil</td>
<td>72</td>
<td>18$</td>
<td>48</td>
<td>6</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Ph D – sponsored – after M Tech/M Phil</td>
<td>72</td>
<td>18$</td>
<td>48</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Ph D – sponsored – after B Tech/ M Sc</td>
<td>96</td>
<td>36*</td>
<td>48</td>
<td>8</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

$NB: The Course requirement includes two compulsory courses. This requirement may be waived for the students who have already taken these courses.

For self-study courses, a PhD student should apply to the Dean (AP) with (a) detailed content of the study; (b) expected outcome; and (c) consent from the faculty under whom the course would be registered. The student enrolled for self-study courses is required to deliver public seminar on each of the self-study course at the end of the semester.

The PhD students are required to register the Synopsis as one Research Unit (3 credits).
*NB: The candidate may apply to the post-graduate committee (PGC) for reduction of minimum course credits. The post-graduate committee would consider the application and may reduce the minimum course credits depending upon the relevant work experience of the candidate but not below 18 course credits.

**NB: The PhD candidate who has not defended his/her PhD Synopsis successfully before the 'Max Duration (Years)' allowed then admission of that PhD candidate will be terminated from PhD program. Such a candidate may request for fresh admission to PhD program by submitting an application to the Admission Committee. If the Admission Committee approves his/her admission, the candidate can be registered as a fresh PhD student and he/she will require completing academic requirements as mentioned in section 2.1.

2.2 M Tech, M Sc and M Des Programs:

The total credits required in the M Tech (ICT) program will be at least 48. The total credits required in the M Sc (IT) and M Sc (ICT in ARD) programs will be at least 72. The total credits required in the M Des (CD) program will be at least 56. The actual credits will be as specified in the approved curriculum applicable to the concerned batch. The maximum permissible duration for the completion of the programs will be 3 years, except that the maximum permissible duration for the M Tech program (sponsored category) will be 4 years.

2.3 Audit Courses:

The students are permitted to audit courses. They will be given a “P” grade, which will be entered in their grade card if they satisfy the requirements placed by the course instructor. If they do not meet the requirements, then they will not get any grade and no entry will be made in the grade-card/transcript for that course.

2.4 Registration for B Tech first and second year core Courses

The PhD Students may be permitted to register for B Tech first and second year core courses with the prior approval of the Dean (Academic Programs) during their course work period. For courses registered, the students should obtain a minimum Grade of ‘C’ to be eligible to appear for Comprehensive Examination.

2.5 Grades, Semester and Cumulative Performance Index:

A student is awarded a letter grade in each course he/she is registered for, indicating his/her overall performance in that course. These letter grades are assigned points on a 10-point scale as described in the table below:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Grade Points</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>AB</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>BB</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>BC</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CD</td>
<td>5</td>
<td></td>
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<tr>
<td>DD</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>Fail</td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>Incomplete</td>
</tr>
<tr>
<td>P*</td>
<td>-</td>
<td>Pass</td>
</tr>
</tbody>
</table>

*For Pass/Fail and Audit Courses only.
a) If a student does not complete all the requirements for a course for a genuine reason, the instructor may award grade I (Incomplete). An I grade must be converted by the instructor to a regular letter grade by the last date for such conversion specified in the Academic Calendar, failing which it is automatically converted to an F grade.

b) A student getting an F grade in a core course must repeat it. An elective course must be either repeated or substituted as suggested by PGC.

c) A student getting a DD or DE grade in a course may substitute it by another course, provided his/her CPI is less than the prescribed minimum for getting the degree for which he/she is registered and the student is allowed to continue in the program.

d) In case a course is repeated or substituted, the old grade will also appear on the transcript although it will not be taken into account while computing the CPI.

e) The grade S or X will be awarded for M Tech, Ph D research credits as follows:

At the end of the semester, the thesis supervisor(s) will assess the student's progress towards the research work during the semester and will award the grade S for each set of 3 credits if the work is satisfactory and X for every unsatisfactory set of 3 credits.

f) If a student is on leave for a part of the semester or submits his/her thesis in the middle of a semester, the PGC may reduce his/her research credits appropriately.

2.6 Sponsored Category (M Tech and Ph D):

A student may be admitted as a sponsored student to the M Tech or Ph D program provided DA-IICT signs an agreement with the sponsoring agency for the same. The Table below indicates the aspects of the student's degree program which would be specified by the agreement. All other requirements would be as indicated in the Academic Requirements for PG Programs. A student admitted to the Ph D program is eligible to move to sponsored category during his/her tenure at DA-IICT.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sponsored Ph D</th>
<th>Sponsored M Tech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Work</td>
<td>12 credits min. at DA-IICT. Additional credits, if required, may be obtained at DA-IICT or could be transferred from his/her sponsoring agency if indicated in the agreement.</td>
<td>24 credits min. at DA-IICT.</td>
</tr>
<tr>
<td>Research</td>
<td>48 credits min. Part or all the research may be carried out at the sponsoring agency as indicated in the agreement.</td>
<td>24 credits min. Part or all the research may be carried out at the sponsoring agency as indicated in the agreement.</td>
</tr>
<tr>
<td>Infrastructure (Research &amp; Course)</td>
<td>DA-IICT and sponsoring agency respectively for the part in which student stays at DA-IICT and at the sponsoring agency.</td>
<td>DA-IICT and sponsoring agency respectively for the part in which student stays at DA-IICT and at the sponsoring agency.</td>
</tr>
</tbody>
</table>
3. ACADEMIC PERFORMANCE REQUIREMENT

3.1 Semester Performance Index (SPI) and Cumulative Performance Index (CPI):

The SPI is an indicator of the academic performance of a student in all the courses he/she has registered during a given semester. It is computed by taking the weighted average of the grades obtained in that semester. The CPI indicates the cumulative academic performance in all the courses taken including those taken in the current semester. CPI is computed by taking the cumulative weighted average of the grades earned till that semester. The SPI and CPI is calculated up to two decimal places. Courses with S and X will not be taken into account in the above computations.

3.2 Minimum CPI requirements for graduation in the program:

<table>
<thead>
<tr>
<th>Program</th>
<th>CPI for Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Tech (ICT)</td>
<td>6.0</td>
</tr>
<tr>
<td>Ph D</td>
<td>7.0</td>
</tr>
<tr>
<td>M Sc (IT)</td>
<td>6.0</td>
</tr>
<tr>
<td>M Sc (ICT in ARD)</td>
<td>6.0</td>
</tr>
<tr>
<td>MDes (CD)</td>
<td>6.0</td>
</tr>
</tbody>
</table>

3.3 Academic Probation and Dismissal:

A student whose CPI falls below the minimum required for graduation at the end of any semester will be placed on Academic Probation for the next semester with written intimation. A student in the M Tech or Ph D program will also be placed on Academic Probation if he/she obtains an X in a research course. For every student placed on Academic Probation for a semester, the PGC will prescribe a specified course load in the concerned semester and may also prescribe a minimum SPI the student must attain in the semester. The PGC will keep a watch on the progress of every student placed on probation and if the performance of a student is poor so that he/she is not likely to benefit from continuing in the program any further, will recommend to the Director that he/she should leave the Institute. A PhD student who obtains more than 5 unsatisfactory (X) grades shall be discontinued from the program. If a student's continuation in the program is terminated, the appropriate authority will issue the letter of termination.

4. Fellowships/Teaching Assistantships:

The DAIICT awards Fellowships/Teaching Assistantships to deserving PhD students. The duration of the Fellowship is five years for PhD after M.Tech/M.Phil and six years for PhD after B.Tech/Msc or up to the month on which the student submits his/her dissertation whichever is earlier, from the date of admission to the program.
4.1 The PhD student who obtains two and more unsatisfactory (X) grade shall be paid only 50% of the Fellowship/Teaching Assistantship effective from the semester in which he/she has obtained the second (X) grade.

5. COMPREHENSIVE EXAMINATION OF Ph D STUDENTS

5.1 Students registered in the Ph D program must pass a comprehensive examination designed to test the overall comprehension of the student in the relevant subjects.

5.2 Students admitted with B Tech, M Sc, MA or M Phil degrees may appear in the comprehensive examination earliest at the end of the second semester, but must pass it before the end of the fourth semester after their first registration. Students admitted with M Tech or equivalent degrees may appear in the comprehensive examination earliest at the end of the first semester, but must pass it before the end of the third semester after their first registration. The above time limits are exclusive of the period of sanctioned withdrawal, if any. The Dean (AP) may relax this requirement for sponsored category of students. The Ph D students working in sponsored research projects of DA-IIICT shall be permitted to defer comprehensive examination by one semester over and the above the stipulated number of semesters.

5.3 Students should have a minimum CPI of 7.0/10 in order to be eligible for appearing in the comprehensive examination.

5.4 The examination will contain oral and/or written part. The PGC will be responsible for organizing the comprehensive examination for all eligible Ph D students every semester.

5.5 Dean (Academic Programs) will, in consultation with the PGC and the concerned Faculty Advisor, constitute the comprehensive examination board, which will consist of at least three but not more than five faculty members. The board will meet as soon as possible after it is constituted and will submit its recommendations to the Dean (Academic Programs).

5.6 When a student has not passed the comprehensive examination in his/her first attempt, a second comprehensive examination will be conducted by the same board that was constituted earlier unless decided otherwise by the Dean (Academic Programs). Both the attempts should be within the stipulated period as indicated in Rule 5.2. In case the duration between the first examination and the desired second one is considered to be short, he/she may not be allowed to appear for the second examination.

5.7 A student will have to discontinue the Ph D program, if he/she fails to pass the comprehensive examination even in the second attempt.

5.8 A student enrolled in the Ph D program is formally admitted to the candidacy for the Ph D degree after he/she has passed the comprehensive examination.

6. MIGRATION RULES

6.1 Eligibility: Students in the M Tech program are eligible to migrate to the Ph D program provided they fulfil the following criteria:

- Student should have entered the program with a B Tech/BE degree or equivalent
- Student should have completed a minimum of two semesters of the M Tech program with at least 18 credits
- Student should have a minimum CPI of 7.0/10.

6.2 Admission Process: A student who wishes to migrate must submit an application to the Dean (Academic Programs) according to the format specified for admission to the Ph D program in the concerned academic year. This must include a research statement. In
addition, the student must submit letters of recommendation from three faculty members who were the instructors in courses taken by the student. The application would be considered as per the procedure laid down for Ph D admissions. However, no application fee or admission fee would be applicable.

6.3 Ph D Requirements: The migrated student would be subject to all the requirements as specified for Ph D students with a B Tech/BE degree or equivalent. However, semesters registered (with resident/external registration) and credits earned as an M Tech student would be carried over to the Ph D program. The prescribed duration for completion of the degree and for passing the comprehensive examination would be regarded as commencing from the time of admission to M Tech program.

6.4 Eligibility for M Tech Degree: A Ph D student who fails to pass the Ph D comprehensive examination within the specified duration, whether admitted directly or via internal migration, is eligible to receive the M Tech degree under the following conditions:

- The student fulfils the eligibility criteria for M Tech program
- The student fulfils the criteria for continuation in the M Tech program
- The student submits an M Tech thesis which fulfils the requirements for such within a maximum of two semesters. This duration would commence from the semester immediately following the semester in which the Ph D comprehensive examination has been failed. Furthermore, the student would not be eligible for financial support during this period.

6.5 Ph D to M Tech Migration: Students in the Ph D program are eligible to migrate to the M Tech program provided they submit an application to the Dean (Academic Programs). Such an application can be accepted only when a student has completed a minimum of two semesters of Ph D and fulfils the following criteria:

- Student should have entered the program with a BTech/BE degree or equivalent
- An appropriate M Tech program should be available in the Institute
- At least 18 course credits completed.
- Student should have a minimum CPI of 6.0/10.0.

6.6 Completion of Requirements for M Tech Program: A student who migrates to the M Tech program from the Ph D program must complete all requirements for the M Tech degree within two years (four semesters) from the time of migration. However, credits earned as a Ph D student would be carried over to the M Tech program.

7. GLOSSARY

Academic Probation: Academic Probation indicates that a student’s academic performance is not up to the expected level. Over and above the academic consequences described in section 3.3, a student who has been placed on probation at any time may be subjected to other restrictions related to financial support, award of medals and prizes, etc.

Cumulative Performance Index (CPI): CPI indicates the cumulative academic performance in all the courses taken including those taken in the current semester. CPI is computed by taking the cumulative weighted average of the grades earned till that semester.

Grade Points: Product of the credits and points of a letter grade awarded to the course.

Postgraduate Committee (PGC): Committee of the Institute responsible for Policy Guidelines and Implementation Strategies covering the Postgraduate Programs.

Semester: Approximately 16 weeks duration each, the first one (Autumn Semester) extending
from July to November and the second (Winter Semester) from December/ January to April.

**Semester Credits**: The sum of credits of courses registered by the student in a semester.

**Semester Grade Points**: The sum of the products of credits and points for each course registered by a student in a semester.

**Semester Performance Index (SPI)**: SPI is an indicator of the academic performance of a student in all the courses he/she has registered during a given semester. It is computed by taking the weighted average of the grades obtained in that semester.

DA-IICT, Gandhinagar
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