

# BIRLA VISHVAKARMA MAHAVIDYALAYA

(ENGINEERING COLLEGE)

(AUTONOMOUS INSTITUTE)

## ACADEMIC REGULATIONS

### FOR POST GRADUATE PROGRAMMES

#### **AR(PG) 1      ADMISSION**

- AR(PG) 1.1      A candidate for admission to the two year degree programme for Master of Technology must have eligibility as per the Gujarat Government/ACPC/GTU/CVM rules.
- AR(PG) 1.2      Admission granted to an applicant is to be considered provisional until all the fees are paid and all the prescribed documents are in order. BVM Engineering College **DISCLAIMS ALL RESPONSIBILITIES** if any of the documents required as per ACPC/ Gujarat Technological University requirements are not submitted or found unacceptable by it. The college will not accept responsibility for students who do not submit the expected examination/ registration forms in time.

#### **AR(PG) 2      PROGRAMMES OF STUDY**

- AR(PG) 2.1      A student shall follow the prescribed courses as given in the programme of study to which he/she is admitted. These courses for various programmes are listed in Annexure – I.
- The syllabi for these courses are given in Annexure – II.

#### **AR(PG) 3      COURSES LEVELS**

- AR(PG) 3.1      At the commencement of each semester a student shall register for the set of courses he/she intends to pursue during the semester. For the registration process, refer AR(PG) 8.
- AR(PG) 3.2      All courses offered are divided into two levels : Level 1 and 2. The levels correspond to successive years of study of a typical M. Tech. student. In other words, a regular student will complete his Level-1 courses during his first year and Level-2 courses during his second year.
- AR(PG) 3.3      The list of courses offered in semester will be announced by the college at the beginning of the semester.

#### **AR(PG) 4      PROGRAMME ELECTIVE COURSES**

- AR(PG) 4.1      Each programme of studies contains a certain number of programme elective courses. Programme elective courses will be offered under each discipline at corresponding level from which a student may choose course(s).

**AR(PG) 5      OPEN ELECTIVE COURSES**

AR(PG) 5.1      Open elective courses are courses offer by a discipline for students other than the corresponding discipline.

**AR(PG) 6      COURSE CREDITS**

AR(PG) 6.1      Each course offered has **L-T-P** structure. Whereas, **L** means number of theory lecture hours per week, **T** means number of tutorial hours per week and **P** means number of practical/laboratory hours per week.

AR(PG) 6.2      Total course credits for a course are obtained by adding the hours of theory lectures, tutorials and practical together. E.g. 4-0-2 means a course has 6 credits, 3-2-0 means a course has 5 credits, 2-2-2 means a course has 6 credits.

**AR(PG) 7      FACULTY COUNSELOR**

AR(PG) 7.1      Each student is assigned to a Faculty Counselor who will advise and counsel him regarding the selection of courses to be registered in a given semester as well as monitor his/ her holistic growth. The final selection of courses made by the student must be approved by his Faculty Counselor.

**AR(PG) 8      REGISTRATION**

AR(PG) 8.1      To earn course credits in a semester a student must register for the courses at the commencement of the semester.

AR(PG) 8.2      At the commencement of each semester a period of two working days is designated as the registration period. A student must complete his registration formalities within this period as per the procedure laid down.

AR(PG) 8.3      A further period of 12 working days is designated as late registration period. During this period a student shall require to pay late registration fee, as decided by the Institute from time to time, to complete his registration. Late registration will only be permitted on genuine reasons (like medical and other unavoidable circumstances) to be approved by the concerned Head of Department and Principal

AR(PG) 8.4      Student shall not be permitted to attend classes without registration.

AR(PG) 8.5      The registration must be completed by the student in person.

AR(PG) 8.6      A student who has completed all the requirements for his degree will not be allowed to register in any further courses.

AR(PG) 8.7      All registrations in every semester must be duly approved by the concerned Head and Principal of the college.

**AR(PG) 9      REQUIREMENTS FOR REGISTRARTION**

- AR(PG) 9.1 A student can register for a course provided that the following conditions are satisfied:
- The course is included for the student's assigned programme of studies, or the student has been permitted to take the course as an open elective.
  - The course is being offered in the semester.

AR(PG) 9.2 The courses selected by the student must be approved by his Faculty Counselor.

**AR(PG) 10 MINIMUM ENROLLMENT**

AR(PG) 10.1 Under normal circumstances an elective course will be conducted in a semester only if a stipulated minimum number of students have registered for the course as decided by the Board of Studies.

AR(PG) 10.2 An elective course in which the number of student registered is less than the stipulated minimum may be withdrawn from the elective course offering of that semester. The student registered in such a course will be permitted to amend their registration.

**AR(PG) 11 ASSESSMENT OF STUDENT PERFORMANCE IN COURSE**

AR(PG) 11.1 The performance of a student in a course is judged through (i) continuous assessment of theory, tutorial and practical work and (ii) end-semester theory, tutorial and practical examinations.

AR(PG) 11.2 The end- semester theory examination in a course has a weightage of 70 percent of theory marks. The remaining 30 percent of theory marks will be awarded through continuous assessment carried out during the semester.

AR(PG) 11.3 The end-semester tutorial/practical examination in a course has a weightage of 60 percent of total tutorial/practical marks and continuous assessment of the same carries the remaining 40 percent of total tutorial/practical marks. Tutorial/practical work (both end-semester and continuous) shall be evaluated on the basis of several of the following instruments of assessment: observation of experimental skills, reports, oral examination, quizzes, end-semester practical examination, attendance, etc.

Continuous assessment (tutorial/practical) scheme is given below:

|   |   |
|---|---|
| Term work   | 20 percent (Equal weightage for every practical.<br>At least 10 practical/ tutorial need to be performed or mini project) |
| Quiz /Assignment/<br>Viva/active<br>learning<br>component | 20 percent  |
| Total   | 40 percent  |

AR(PG) 11.4 The overall performance of student in the course is assessed on the principle of a "single head of passing", i.e., there will be a single grade for a course based upon the aggregate of marks obtained by the student in theory and practical components in continuous assessment as well

as end semester examination. However, a student should score minimum 40% marks in end semester examination to make himself/ herself gradable.

Examiner(s) can grace up to 10% of total marks of end semester theory examination in marks of end semester theory examination to make a student gradable by making the resolution of the same in grade sheet. However, grace marks shall not be counted in the aggregate of marks obtained by the student for the grading.

## **AR(PG) 12 EXAMINATIONS**

AR(PG) 12.1 The end-semester examination for all courses offered in each semester of an academic year will be conducted by the Institute.

AR(PG) 12.2 No student shall be allowed to the end semester examination unless he/she has attended minimum 75% of Theory Lectures/ Tutorials/ Practical classes of the course and will be awarded letter grade LA (Ref. AR(PG) 13) in all the subjects he/she has registered in the corresponding semester.

AR(PG) 12.3 The college will conduct two continuous assessment of theory (mid semester examination) in a semester for each subject. The average marks of two mid semester examinations shall be considered as the final marks for continuous assessment of theory.

A student who remains absent in any of the two mid semester examination for whatsoever reason(s) shall be awarded with zero marks in the respective mid semester examination.

However, a student remains absent due to any of the following unforeseen reasons, shall be permitted to appear along with remedial mid-semester examination. The marks of mid semester remedial examination of such students shall be considered as marks of mid semester examination in which he/she remained absent.

- a) A student is critically ill or injured. (Student or his/her relative shall get prior approval)
- b) Death of direct blood relation relative. (Student or his/her relative shall inform to Head/Principal immediately after the incident and permission will not be granted for more than 24 hours)
- c) A student representing Gujarat state in national level events and/or India in international events organized by official boards.

AR(PG) 12.4 No student shall be allowed to appear in the end semester examination of a course unless he/she scored at least 30% marks in mid semester examination and will be considered in "NOT PERMITTED TO APPEAR (NPTA)" status for the respective course. The NPTA status carries zero grade point in performance index calculation.

Remedial mid semester examination shall be conducted by the department for NPTA students before the beginning of the end semester examination. If a student gets 30% or more marks, he/she shall be "PERMITTED TO APPEAR" in the end semester examination. However, he/she will be awarded only 30% marks in continuous theory assessment. For genuine reasons, if a student remains absent in the mid semester examination and subsequently appear in the remedial examination, the marks scored by the student will be considered as continuous theory assessment marks.

If a student still remains with NPTA status, he/she shall appear in mid semester remedial

examination of the next semester.

AR(PG) 12.5 The End Semester tutorial/practical examination shall be rescheduled for a student who is not able to appear in the regular schedule due to following reason.

- a) A student is critically ill or injured. (Student or his/her relative shall get prior approval)
- b) Death of direct blood relation relative. (Student or his/her relative shall inform to Head/Principal immediately after the incident and permission will not be granted for more than 24 hours)
- c) A student representing Gujarat state in national level events and/or India in international events organized by official boards.

However, such rescheduling should be confined within the Academic Calendar of the respective semester.

AR(PG) 12.6 The college will conduct only one continuous assessment of theory (mid semester examination) for all subjects of the semester in the following cases.

- a) First Semester of M. Tech.
- b) Corresponding semester of the year of transfer for transferred students or international students, if the admission of such students is five week later than commencement of academic calendar.

### AR(PG) 13 LETTER GRADES

AR(PG) 13.1 The overall performance of a student in a course is represented by a letter grade from AA to **FF** and **LA** with the following meaning and equivalent grade points:

| LETTER GRADE | EQUIVALENT<br>GRADE POINTS | REMARK                |
|--------------|----------------------------|-----------------------|
| AA           | 10                         | Outstanding           |
| AB           | 9                          | Excellent             |
| BB           | 8                          | Very Good             |
| BC           | 7                          | Good                  |
| CC           | 6                          | Average               |
| CD           | 5                          | Pass                  |
| FF           | 0                          | Fail                  |
| LA           | 0                          | Low Attendance (Fail) |

AR(PG) 13.2 A course is completed successfully, i.e., credit is earned for a course, when a letter grade CD or better (in grade points) is obtained in the course.

AR(PG) 13.3 The scheme of awarding letter grades and the letter grades awarded in each course are subjected to scrutiny and approval by Academic Council.

### AR(PG) 15 FAILURE IN A COURSE

AR(PG) 15.1 A student earns **zero** credit for a course when he gets letter grade **FF** or **LA** in the course.

AR(PG) 15.2 If letter grade **FF** or **LA** is obtained in an elective course, the student may change the elective.

- AR(PG) 15.3 The letter grade **FF** or **LA** obtained in a course will be shown in the final transcript issued to the student (refer AR(PG) 22) whether or not he subsequently obtains another letter grade in a repeat attempt.
- AR(PG) 15.4 A student with letter grade **LA** should repeat the course i.e. he/she should attend theory and practical classes as and when the course is offered.
- AR(PG) 15.5 A student with letter grade **FF** should appear in end semester theory as well as practical/ viva exam and should obtain a letter grade **CD** or better (in grade points).
- AR(PG) 15.6 A student with more than **four FF grade and/or NPTA status** in a level will not be allowed to move to the next level.

**AR(PG) 16 SEMESTER PERFORMANCE INDEX (SPI)**

- AR(PG) 16.1 The performance of a student in a semester is expressed in terms of the semester Performance Index (SPI).
- AR(PG) 16.2 The semester Performance Index is the weighted average of course grade points obtained by the student in the course taken in the semester. The weights assigned to course grade points are the credits carried by the respective courses.

That is,

$$SPI = \frac{\sum_{i=1}^n g_i c_i}{\sum_{i=1}^n c_i}$$

where,  $g_i$  is the equivalent grade point of  $i^{th}$  course,

$c_i$  is the credit of the course

$n$  is total number of courses registered by the student in a semester

**AR(PG) 17 CUMULATIVE PERFORMANCE INDEX (CPI)**

- AR(PG) 17.1 The cumulative performance of student is expressed in terms of the Cumulative Performance Index (CPI). This index is defined as the weighted average of course grade points obtained by the student for all courses taken since entry to the programme, where the weights are defined in same way as in AR(PG) 16.
- AR(PG) 17.2 If a student repeats a course, only the grade points obtained in the latest attempt are counted towards the Cumulative Performance Index (CPI).

**AR(PG) 18 DISCONTINUINACE FROM THE PROGRAMME**

- AR(PG) 18.1 A Semester Performance Index (SPI) of less than 3.00 in two consecutive semesters shall disqualify a student from continuing his studies. Such a student will be referred to the Academic Council. After considering the extenuating circumstances, if any, the Academic Council shall decide whether the student should be allowed to continue his/ her studies. The Academic Council decision shall be final and binding.

**AR(PG) 19 ADMISSION BY TRANSFER**

AR(PG) 19.1 For a student admitted by transfer to the M. Tech. programme after completing part of his degree requirements elsewhere or under the previous regulations, the Board of Studies (BOS) shall decide the subjects which he/ she is deemed to have completed and shall be exempted from those subjects. In the grade sheet, the exempted subjects shall be specified as "EXEMPTED".

AR(PG) 19.2 The remaining requirements must be completed by the student in a proportionately smaller number of semesters which shall be prescribed for him at the time of his admission to the programme.

AR(PG) 19.3 The CPI of such a student will be calculated on the basis of only the courses taken at this Institute.

**AR(PG) 20 REQUIREMENTS FOR THE AWARD OF M. Tech. DEGREE**

AR(PG) 20.1 To be eligible for the award of the degree of Master of Technology a student must earn a total of at least **115** credits as prescribed under his programme of studies with

- i) A minimum CPI of 5.00 and
- ii) No course with letter grade FF or LA at any level.

AR(PG) 20.2 The total credits requirements for the degree of M. Tech must be completed in not more than 8 semesters from the date of admission.

AR(PG) 20.3 For a student admitted by transfer the maximum permissible duration shall be 50 percent more than the period prescribed for completion of his programme at the time of his admission.

AR(PG) 20.4 If the Academic Council is satisfied that there are extenuating circumstances, the student may be allowed a maximum of 2 additional semesters to complete his degree requirements.

**AR(PG) 21 AWARD OF CLASS**

AR(PG) 21.1 The class awarded to a student with his M. Tech. degree is decided by his final CPI as per the following table :

FIRST CLASS WITH DISTICTION - CPI not less than 7.25  
FIRST CLASS - CPI less than 7.25 but not less than 6.50  
SECOND CLASS - CPI less than 6.50 but not less than 5.75  
PASS CLASS - CPI less than 5.75 but not less than 5.00  
CPI less than 5.00 is not eligible for award of degree

A candidate who passes in all subjects and all heads of passing in the examination shall be given a gracing of the required CPI for getting second class/ first class/ first class with distinction, subject to a maximum of CPI 0.10, in concurrence with rules and guidelines of AICTE/ GTU.

**AR(PG) 22 TRANSCRIPT**

AR(PG) 22.1 The Transcript issued to the student at the time of leaving the University will contain a consolidated record of the entire course taken by him, grades obtained, SPI, CPI, etc.

## **AR(PG) 23 EXAMINERS**

AR(PG) 23.1 The respective board of studies shall appoint at least two examiners for end semester theory as well as practical/viva examination. For each end semester theory examination, there shall be two paper setters. One paper setter out the two shall be from outside the institute (external examiner). The end semester theory and practical examination of each subject shall be conducted by an internal and an external examiner. The internal examiner shall be appointed as convener who shall co-ordinate the examination procedure for end semester examinations of the respective subject.

## **AR(PG) 24 RE-ASSESSMENT**

AR(PG) 24.1 A student shall apply for re-assessment of his/ her answer books of end semester examination (theory) only within seven working days after the declaration of the results.

AR(PG) 24.2 The board of studies shall appoint **two examiners (one is Convener of original exam and other is new examiner)** for the reassessment of the end semester examination (theory) for both sections. **Both examiners shall jointly reassess both the sections.**

AR(PG) 24.3 The marks obtained by the candidate shall be considered for grading after re-assessment, only if, the change in mark is more than or equal to 10% of total mark of End Semester **(Theory)** Examination.

## **AR(PG) 25 GRADING**

AR(PG) 25.1 The office of the Controller of Examination shall prepare the histogram of each subject for the purpose of grading after the completion of assessment of the subject. The histogram for dissertations shall not be prepared and each dissertation shall be graded individually as per the guidelines given from time to time.

AR(PG) 25.2 The convener of the respective subject shall grade the students based on the histogram provided by the Controller of Examination.

## **AR(PG) 26 GRADE REVIEW**

AR(PG) 26.1 The Academic Council shall appoint Grade Review Committee for each semester. The Grade Review Committee shall constitute following members.

- (a) Principal
- (b) All Board of Studies Chairman
- (c) University Nominee
- (d) Dean, Academics
- (e) Associate Dean, Academics
- (f) Controller of the Examination
- (g) Member Secretary, Academic Council
- (h) Office-in-charge of Credit System



AR(PG) 26.2 The Grade Review Committee shall meet immediately after results of all courses are completed and review the grades awarded by the convener of respective subject. The revision of the grade suggested by the Grade Review committee shall be considered as final grade and binding.

**AR(PG) 27 DISSERTATION EVALUATION**

AR(PG) 27.1 The student shall present his/her progress during the dissertation phase for atleast two times in a semester as a part of continuous evaluation. The presentation shall be evaluated by the Dissertation Progress Committee (DPC). The DPC comprises atleast two faculty members from the department of same area/field and the guide. The convener of the DPC shall be other than guide of the student.

AR(PG) 27.2 At the end of each semester, the dissertation shall be evaluated by the guide (internal examiner) and external examiner.

AR(PG) 27.3 Marks Distribution for a Dissertation in a semester shall be as follows.

| Continuous Evaluation (CE)  | End Semester Examination (ESE)   |
|---|--|
| 40 Marks  | 60 Marks   |
| Evaluated in two presentations by DPC as per AR(PG) 27.1, each evaluator has equal weightage in assessment. | Evaluated in the presentation made by the student at the end of semester by internal examiner/s and external examiner/s. Internal examiner/s shall award 50% of ESE marks and external examiner/s shall award 50% of ESE mark. |

AR(PG) 27.4 As partial fulfilment of the dissertation, the student shall present/publish atleast one paper in conference/journal.

AR(PG) 27.5 The student shall submit the plagiarism report for his/her thesis. The thesis with less than 20% plagiarism shall be accepted for the End Semester Presentation. The plagiarism instruction shall be issued from time to time.

AR(PG) 27.6 No exemption/relaxation in the course work of 3rd and 4th semester shall be permitted during the dissertation period of the PG student.