RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

Established under Act No. 13 of 1998
Ordinance No. .20...

Ordinance for 4-year B.TECH. (Software Engineering) Degree through e-Learning and Distance Education

(w.e.f. the year 2002-2003)

The first degree in Technology of four-year (eight-semester) course, hereafter called B.TECH. (SWE), shall be designated as BACHELOR OF TECHNOLOGY – (SOFTWARE ENGINEERING).

1.1 This degree program leading to the award of B.TECH. (SWE) shall be delivered through e-Learning partly to begin with, and fully later.

1.2 The studies and examinations of the B.TECH. (SWE) courses shall be on the basis of marks-cum-credit system.

1.3 The program will be offered by RGPV at selected NIIT Education Centers worldwide and selected institutions, affiliated to RGPV.

2.0 ADMISSIONS

- 2.1 The minimum qualification for admission to the first year B.TECH. (SWE) shall be passing of Higher Secondary School Certificate Examination conducted by M. P. Board of Secondary Education under the 10+2 scheme with Science stream with minimum of 50% marks or an equivalent examination from a recognized Board/University. The admission will be regulated by RGPV through an Entrance Test.
- Candidates who have passed the Polytechnic Diploma course with 55% marks in IT, Computer Science & Engineering or Electronics & Communication disciplines from M.P. Board of Technical Education, Bhopal or its equivalent shall be eligible for lateral entry to the Third year (fifth semester) of B.TECH. (SWE). After admission, their enrollment to the Third year (5th semester) of B.TECH. (SWE), will be on the precondition that they successfully clear the specified Foundation Course of one semester duration to be offered by RGPV.
- 2.3 Candidates who have 2-year (four-semester) DNIIT with two Honors courses of NIIT after 10+2 with overall performance of 60 % or more are eligible for lateral entry to the Third year (fifth semester) of B.TECH. (SWE). After admission, their enrollment to the Third year (5th semester) of B.TECH. (SWE), will be on the precondition that they successfully clear the specified Foundation Course of one semester duration to be offered by RGPV.



- 2.4 Candidates from all across the world, who satisfy the criterion mentioned in clause 2.1 above, shall be eligible for admission to B.TECH. (SWE) after the Act of the University are accordingly amended.
- 2.5 The Entrance Test will be conducted by RGPV at its designated Centers.
- 2.6 The RGPV will admit the students on the basis of merit in the entrance test.
- 2.7 The rules of RGPV shall govern the admissions to B.TECH. (SWE).
- 2.8 In case a candidate has not done adequate mathematics in the higher secondary school or its equivalent, he/she shall be required to undergo remedial course in Mathematics after the candidate has been admitted through the Entrance Test.

EXAMINATIONS

- 3.1 There shall be University Examination at the end of each semester of the B. Tech. (SWE) Program including the Foundation Course and for Remedial Course in Mathematics.
- 3.2 These Examinations shall be named as follows:-
- (a) Remedial Course Examination in Mathematics
- (b) Foundation Course Examination for lateral entry candidates.
- (c) FIRST YEAR
 - First Semester B.TECH. (SWE) Exam
 - Second Semester B.TECH. (SWE) Exam
- (d) SECOND YEAR
 - Third Semester B.TECH. (SWE) Exam
 - Fourth Semester B.TECH. (SWE) Exam
- (e) THIRD YEAR
 - Fifth Semester B.TECH. (SWE) Exam
 - Sixth Semester B.TECH. (SWE) Exam
- (f) FOURTH YEAR
 - Seventh Semester B.TECH. (SWE) Exam
 - Eighth Semester is a Thesis/ Major Project/ Industry Internship Semester. There will be a mandatory requirement of Written Thesis/Dissertation at the end of the semester. Written Thesis/Dissertation will be evaluated by the University.
- 3.3 The examinations of First semester (I), Third semester (III), Fifth semester (V) and Seventh semester (VII), called odd-semesters, shall generally be held in the months of December-January. Similarly the examinations of Second semester (II), Fourth semester (IV), and Sixth semester (VI) called even-semesters, shall generally be held in the months of May-June. The Examination of Foundation Course will be held twice a year in December-January and May-June. The examination for Remedial Course in Mathematics will be held twice every year in December-January and May-June.
- 3.4 If a candidate is unable to pass/clear some courses of an odd semester examination he/she shall be permitted to appear as an ex-student in the subsequent semester examination. Likewise, if a candidate is unable to pass/clear some courses in even-semester examination, he/she shall be permitted to appear as an ex-student in the subsequent semester-examination. To enable the candidates to



- clear their backlog courses as quickly as possible, the examinations of all the theory papers and practice components shall be held during every semester examination.
- 3.5 If a candidate is unable to clear the examination of the Foundation Course for lateral entry students, he/she shall be permitted to appear in the subsequent examination of the Foundation Course. The student will have three attempts to clear the Foundation Course. Without clearing the Foundation Course Examination, the candidate can not register to the fifth semester of the Program.
- 3.6 A student can clear the Remedial Course Examination in Mathematics in a maximum of three attempts and before entering fifth semester of the Program.
- 3.7 There will be no supplementary examination.
- 3.8 A candidate shall not be admitted to the fifth or higher semester classes unless he/she has fully passed/cleared the first and second semester examinations. Likewise candidates shall not be admitted to the seventh or higher semester classes unless he/she has fully passed/cleared the first four semester examinations. For promotion to the next higher semester, the sequence shall be strictly adhered to.

PASSING EXAMINATIONS

4.1 Basis of Grades

- 4.1.1 There shall be course wise grade with continuous evaluation pattern.
- 4.1.2 The evaluation consists of multiple instruments
- 4.1.3 The performance of a candidate in each semester, including Foundation Course, shall be evaluated course-wise, with weightage of 50% for semester ending examination (Theory), 25 % for Semester ending Examination (Practice), conducted by the University and the balance 25% for the Sessionals including Assignments and other components. The semester ending examination will be a 3-hour Paper-pencil exam for Theory.
- 4.1.4 Sessionals will comprise of instruments of evaluation such as tests, assignments and practical tests. There shall be minimum of two instruments of evaluation in every course during a semester of 12.5 % weightage each. The sessionals will be evaluated by the Course Instructors.
- 4.1.5 There shall be continuous sessionals and semester ending examination for each course with the following distribution subject to a minimum pass marks as indicated below.

Name of Exam	Weighted %	Marks	Minimu	n Pass Marks
Sessionals	25	50	25	
End-semester			-	
Theory	50	100	40	
Practice	25	50	25	OUDYCGIKI
Aggregate Performance	e 100	200	90 /	REGIONOGIKI VIQUE

d.1.6 For eligibility to appear in the semester ending examination, students will be required to have 75 % attendance in practice/hands-on sessions in all courses.

4.2 Basis of Credits

- 4.2.1 The program structure is modular, and will follow credit cum marks system. Student will earn credits in a course after s/he puts in the requisite effort in terms of hours defined below and obtains minimum pass marks in all the evaluation components defined in 4.1.5
- 4.2.2 The credit is defined as per the norms of open education system. 1 Credit = 30 Hours of total study by the student. These 30 hours are distributed into:

Contact Sessions	=	4 Hours
Practice/Hands-on where required	=	8 Hours
Self Reading	=	8 Hours
Assignments	=	6 Hours
Self Evaluation	=	4 Hours

4.2.3 Course-wise category, credit percentage of courses of B.TECH. (SWE) shall be as follows:

Category	Credits	% of Total Credits
 Humanities, Social Science, 	31	26%
Management, Basic and Engg.		•
Science and Interdisciplinary		
Courses		•
2. Disciplinary Core and	59	49%
Elective Courses	•	
3. Non-Examination	30	25%
Disciplinary courses		
TOTAL CREDITS	120	100%

- 4.2.4 A candidate shall earn all the credits allotted to the semester only when he/she passes the said semester. The grades and points earned in a semester shall be called as GPA Grade Point Average.
- 4.2.5 A candidate shall be eligible for the award of Degree of B.TECH. (SWE) only when he/she earns all the 120 credits allotted, except for students admitted through lateral entry. In case of students, admitted to third semester of the Program, the total credit requirement will be 90 and for those admitted to Foundation Course, total credit requirement will be between 60 to 75 credits, on a case by case basis.
- 4.2.6 Performance in Foundation Course will be included in computation of CGPA.
- 4.2.7 Performance in Remedial Course in Mathematics will not be included in computation of CGPA.

- There shall be at least fifteen weeks of practice and counseling through contact sessions in every semester.
- 5.2 The Program structure is modular, based on accumulation of credits.
- 3.3 The normal load for a student in each semester is 15 credits.
- 5.4 The maximum permissible time period for completion of the program will be 7 Years.
- 5.5 In case of a lateral entry student, the maximum permissible time span to pass the degree will be 5 years.

AWARD OF GRADE

- 6.1 Grades shall be awarded at the end of each semester. The semester performance will be called as GPA.
- Students will receive a grade for every course. There will be five grades: A with 10 points, B with 8 points, C with 6 points, D with 4 points and E with 2 points. E is a Fail Grade. The course with E grade will have to be repeated.

Grade	% Marks	Interpretation
E	<4516	Fail
D	45-39.9	Satisfactory
C	60-69.9	Good
В	70-79.9	Very Good
Α	80-100	Excellent

- 6.3 Cumulative Grade Point Average (CGPA) will indicate cumulative performance at any time.
- 6.4 The minimum CGPA to qualify for the award of degree will be 4.5

7.0 CONDONATION OF DEFICIENCY IN MARKS

- 7.1 With a view to moderate borderline cases in the examination and evaluation, the following procedures shall be observed:
 - 7.1.1 Deficiency of up to 5 marks shall be condoned to the advantage of the candidate for passing the examination, provided the candidate has failed only in a maximum of two theory, or one theory and one practical or two practical examinations. This facility shall be available only to those candidates who appear at the end-semester examination in the first attempt.
 - 7.1.2 While declaring result of the candidate no marks shall be added to or subtracted from the aggregate for the deficiency condoned as above. However, he/she will pass the subjects cleared under Clause 7.1.1. and the



- candidate's result shall be declared in the grade which the aggregate entitles him/her.
- 7.1.3 One grace mark shall be given to the candidate who is failing/missing the next higher grade by one mark on behalf of the VC in the B.Tech. SWE examinations.
- (1) If a candidate has passed a semester examination in full he/she shall not be permitted to reappear in that examination for improvement in grades/marks or any other purpose.
- The University will decide to issue the Certificates to the candidate at the end of each module/year of the B.TECH. (SWE) program.



