

St. Peter's University

Chennai – 600 054.

M.TECH. (INFORMATION TECHNOLOGY) PROGRAMME

Regulations and Syllabi

(Effective from 2008 – 2009)

- 1. Eligibility:** Candidates who passed B.E. / B.Tech. (CSE / IT) of the University or any other equivalent examination thereto are eligible for admission to Two Year M.Tech. (Information Technology) Programme.
- 2. Duration:** Two Years Comprising 4 Semesters. Each semester has a minimum 90 working days with a minimum of 5 hours a day.
- 3. Medium:** English is the medium of instruction and examination.
- 4. Weightage for Continuous and End Assessment:** The weightage for Continuous Assessment (CA) and End Assessment (EA) be 25:75 unless the ratio is specifically mentioned in the scheme of Examinations.
- 5. Credit System:** Credit system be followed with 18 credits for each semester and each credit is equivalent to 25-30 hours of effective study provided in the Time Table.

6. Scheme of Examinations (for I to IV Semesters)

I Semester

COURSE CODE	COURSE TITLE	CREDIT	MARKS		
			CA	EA	TOTAL
THEORY					
108ITPT01	Applied Mathematics	3	25	75	100
108ITPT02	Data Structures & Algorithm	4	25	75	100
108ITPT03	Computer Organization	4	25	75	100
108ITPT04	Data Communication & Networks	3	25	75	100
108ITPT05	Software Engineering Methodologies	3	25	75	100
PRACTICAL					
108ITPP01	Programming Lab	1	25	75	100
TOTAL		18	150	450	600

II Semester

COURSE CODE	COURSE TITLE	CREDIT	MARKS		
			CA	EA	TOTAL
THEORY					
208ITPT01	Information Systems Design	3	25	75	100
208ITPT02	Advanced Database Technology	3	25	75	100
208ITPT03	Operating Systems Design	3	25	75	100
208ITPT04	Software Requirements Management	2	25	75	100
ELECTIVES					
208ITPE**	Elective - I	3	25	75	100
208ITPE**	Elective - II	3	25	75	100
PRACTICAL					
208ITPP01	Web Technology Lab	1	25	75	100
TOTAL		18	200	600	800

III Semester

COURSE CODE	COURSE TITLE	CREDIT	MARKS		
			CA	EA	TOTAL
THEORY					
308ITPT01	Distributed System	3	25	75	100
308ITPT02	Software Testing and Quality Assurance	3	25	75	100
ELECTIVE					
308ITPE**	Elective - III	3	25	75	100
PROJECT					
308ITPP01	Project Work (Phase - I)	9	50	150	200
TOTAL		18	125	375	500

IV Semester

COURSE CODE	COURSE TITLE	CREDIT	MARKS		
PROJECT			CA	EA	TOTAL
408ITPP01	Project Work (Phase – II)	18	25	75	100
TOTAL		18	25	75	100

List of Electives for II & III Semesters:

S.No.	Electives
1.	Digital Signal Processing
2.	XML and Web Services
3.	Enterprise Resource Planning
4.	Grid Computing
5.	Pervasive Computing
6.	Information Security
7.	Component Based Technology
8.	Bio-Informatics
9.	Soft Computing
10.	Language Technologies
11.	Artificial Intelligence
12.	Embedded Systems
13.	Data Warehousing & Data Mining
14.	Mobile Computing
15.	Software Project Management
16.	Digital Imaging
17.	High Speed Networks
18.	Network Security

7. Passing Requirements: The minimum pass mark (raw score) be 50% In End Assessment (EA) and 50% in Continuous Assessment (CA) and End Assessment (EA) put together. No minimum mark (raw score) in Continuous Assessment (CA) be prescribed unless it specifically mentioned in the scheme of Examination.

8. Grading System: Grading System on a 10 Point Scale be followed with 1 mark = 0.1 Grade point to successful candidates as given below.

$$\begin{aligned}
 \text{(a) Overall weighted Average Marks} &= \frac{\text{Sum of Weighted Marks}}{\text{Total Credits}} \\
 &= \frac{\sum (CA+EA)C}{\sum C}
 \end{aligned}$$

$$\begin{aligned}
 \text{Where Weighted Marks in each course} &= \text{Total Marks (CA and EA) multiplied by number of Credit} \\
 &= (CA+EA)C
 \end{aligned}$$

$$\begin{aligned}
 \text{(b) Overall Grade Point Average (OGPA)} &= \frac{\text{Sum of Weighted Grade Points}}{\text{Total Credits}} \\
 &= \frac{\sum (CA+EA)C}{\sum C}
 \end{aligned}$$

$$\begin{aligned}
 \text{Where Weighted Grade Points in each course} &= \text{Grade Points (CA and EA) multiplied by Credits} \\
 &= (CA+EA)C
 \end{aligned}$$

The Overall Grade: The Overall Grade and Classification of all successful candidates be arrived at from the Overall Grade Point Average as stipulated in the following conversion Table.

(1 mark = 0.1 Grade Point on a 10 Point Scale)

Grade	Over all Grade Point Average(OGPA)	Over all weighted Average marks	Classification
0	9.00 to 10.00	90.00 to 100	First Class
A	8.00 to 8.99	80.00 to 89.99	First Class
B	7.00 to 7.99	70.00 to 79.99	First Class
C	6.00 to 6.99	60.00 to 69.99	First Class
D	5.00 to 5.99	50.00 to 59.99	Second Class
F	0.00 to 4.99	0.00 to 49.99	Fail

The Grade Sheets of successful candidates provide particulars such as (1) Overall weighted Average Marks, (2) Overall Grade Point Average, (3) Overall Grade and (4) Overall classification.

9. Pattern of the Question Paper: The question paper for End Assessment will be set for three hours and for the maximum of 100 marks with following divisions and details.

Part A: 10 questions (with equal distribution to all units in the syllabus). Each question carries 2 marks.

Part B: 5 question with either or type (with equal distribution to all units in the syllabus). Each question carries 16 marks.

The total marks scored by the candidates will be reduced to the maximum prescribed in the Regulations.

10. Syllabus

Registrar