

PARUL UNIVERSITY

R/Notification-1398/2024-25

Office of the Registrar
December 17, 2024

NOTIFICATION

Sub: Course Structure and Syllabus of Semester 3rd and 4th for Curriculum 2023-2024 for Diploma in Computer Engineering, Diploma Engineering in Information Technology and Diploma Engineering in Biotechnology Programmes

Ref: (i) Proceedings of the Eighteenth Meeting of the Governing Body held on December 2, 2024

(ii) Orders of the Provost

PREAMBLE:

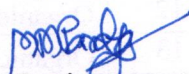
Dean, Faculty of Engineering & Technology proposed Course Structure and Syllabus of Semester 3rd and 4th for Curriculum 2023-2024 for Diploma in Computer Engineering, Diploma Engineering in Information Technology and Diploma Engineering in Biotechnology Programmes during the Eighteenth Meeting of the Governing Body held on December 2, 2024 which was approved by the Governing Body. Hence, the Order.

ORDER:

Course Structure of Semester 3rd and 4th for Curriculum 2023-2024 for Diploma in Computer Engineering, Diploma Engineering in Information Technology and Diploma Engineering in Biotechnology are enclosed in the Annexure.

Dean, FE & T is informed to arrange to upload syllabus of Semester 3rd and 4th for Curriculum 2023-2024 for Diploma in Computer Engineering, Diploma Engineering in Information Technology and Diploma Engineering in Biotechnology on MIS.

By Order



Registrar

To,

1. Dean, Faculty of Engineering & Technology and Principal, PIET
2. Principal, PIT/PIET (DS)/PPI

Copy to,

- 1) The Controller of Examinations
- 2) Director (IQAC)
- 3) PUMIS Coordinator

Submitted to,

- 1) The President
- 2) The Provost

ANNEXURE

Faculty of Engineering and Technology - PIT-DS		
Diploma in Biotechnology		
Semester - 1		
S. No.	Name of the Subject	Credits
1	Applied Chemistry	3
2	Applied Chemistry Lab	1
3	Environmental Science	0
4	Introduction to IT Systems Lab	2
5	Basics of Biology	2
6	Fluid Mechanics	2
7	Fluid Mechanics Lab	1
8	Mathematics - I	3
9	Basic Physics Lab	1
10	Basic Physics	3
11	Communication Skills - I	1
Total		19
Semester - 2		
S. No.	Name of the Subject	Credits
12	Organic Chemistry	4
13	Organic Chemistry lab	1
14	Engineering Workshop Practice	2
15	Molecular Biology	3
16	Basic of Chemical Engineering Thermodynamics	3
17	Basic Taxonomy in Biology	3
18	Food Microbiology Lab	2
19	Mathematics-II	4
20	Communication Skills -II	1
Total		23
Semester - 3		
S. No.	Name of the Subject	Credits
21	Entrepreneurship and Start-ups	1
22	Biochemical Calculations	4
23	Life science-I	4
24	Bioenergetics	4
25	Bioprocess Engineering	4
26	Bioprocess Engineering Lab	1
27	Professional Communication and Critical Thinking	1
Total		19
Semester - 4		
S. No.	Name of the Subject	Credits

28	Essence of Indian Knowledge and Tradition	0
29	Cell Biology	3
30	Analytical Instruments for Biotechnology	3
31	Analytical Instruments for Biotechnology Lab	1
32	Fundamentals of Process Engineering	3
33	Basics of Food Processing	3
34	Basics of Food Processing Lab	1
35	Life Science-II	4
36	Minor Project	1
37	Employability Skills	1
Total		20
Semester - 5		
S. No.	Name of the Subject	Credits
38	Biochemistry	4
39	Biochemistry Lab	1
40	Bioinformatics	4
41	Bioinformatics Lab	1
42	Environmental Biotechnology	3
43	Bioethics, IPR and Biosafety	3
44	Major Project-I	6
45	Summer Internship (2 Week After Sem - 4)	2
Total		24
Semester - 6		
S. No.	Name of the Subject	Credits
46	Indian Constitution	0
47	Plant Tissue Culture	4
48	Plant Tissue Culture Lab	1
49	Genetic Engineering	4
50	Genetic Engineering Lab	1
51	Major Project-II	6
52	Program Elective - 01 (Compulsory Subjects :1)	3
53	Program Elective - 02 (Compulsory Subjects :1)	3
Total		22
Semester – 6 (Program Elective 01)		
1	Metabolic Engineering	3
2	Entrepreneurship in Biotechnology	3
Semester – 6 (Program Elective 02)		
1	Biomaterials and Implants	3
2	Genomics and Proteomics	3
Grand Total		127

Faculty of Engineering and Technology – PIET-DS, PPI		
Diploma in Computer Engineering		
Semester - 1		
S. No.	Name of the Subject	Credits
1	Basics of Web Development	3
2	Programming in C - I	5
3	Mathematics-I	3
4	Fundamentals of Electrical and Electronics Engineering	4
5	Communication Skills - I	1
6	Environmental Science	0
Total		16
Semester - 2		
S. No.	Name of the Subject	Credits
7	Programming in C - II	5
8	Computer Workshop Lab	1
9	Python Programming	5
10	Basic Physics	4
11	Mathematics-II	4
12	Communication Skills - II	1
Total		20
Semester - 3		
S. No.	Name of the Subject	Credits
14	Entrepreneurship and Start-ups	1
15	Operating Systems	4
16	Object Oriented Programming with C++	5
17	Data Structure	4
18	Introduction to DBMS	5

19	Professional Communication and Critical Thinking	1
20	Computer Organization and Architecture	4
Total		24
Semester - 4		
S. No.	Name of the Subject	Credits
21	Essence of Indian Knowledge and Tradition	0
22	Computer Networks	3
23	Software Engineering	3
24	Java Programming	5
25	Algorithms	4
26	Web Development using PHP	5
27	Minor Project	1
28	Employability Skills	1
Total		22
Semester - 5		
S. No.	Name of the Subject	Credits
30	Internet of Things	4
31	Net Programming with c#	5
32	Information Security	4
33	Summer Internship	2
34	Major Project - I	6
35	Program Elective - I	4
Total		25
Semester - 5 (Program Elective 01)		
1	Cloud Computing	4
2	Data Mining	4
Semester - 6		
S. No.	Name of the Subject	Credits

36	Indian Constitution	0
37	Mobile Application Development	5
38	Digital Marketing	2
39	Major Project - II	6
40	Program Elective - II	4
41	Program Elective - III	4
Total		21
Semester - 6 (Program Elective 02)		
1	Advanced Database Management System	4
2	Software Testing	4
Semester - 6 (Program Elective 03)		
1	Multimedia Technologies	4
2	Artificial Intelligence and Machine Learning	4
Grand Total		127

Faculty of Engineering and Technology - PPI		
Diploma in Information Technology		
Semester - 1		
S. No.	Name of the Subject	Credits
1	Basic Physics	4
2	Environmental Science	0
3	Programming in C-I	5
4	Mathematics-I	3
5	Computer Workshop Lab	1
6	Communication Skills-I	1
7	Basics of Web Development	3
Total		17
Semester - 2		
S. No.	Name of the Subject	Credits
8	Programming in C-II	5
9	Python Programming	5
10	Fundamentals of Electrical and Electronics Engineering	4
11	Mathematics-II	4
12	Communication Skills - II	1
Total		19
Semester - 3		
S. No.	Name of the Subject	Credits
13	Entrepreneurship and Start-ups	1
14	Operating Systems	4
15	Object Oriented Programming with C++	5
16	Data Structure	4
17	Software Development	3
18	Professional Communication and Critical Thinking	1
19	Computer Organization and Architecture	4
Total		22
Semester - 4		
S. No.	Name of the Subject	Credits
20	Essence of Indian Knowledge and Tradition	0
21	Database Management System	5
22	Data Communication Network	3
23	Core JAVA Programming	5
24	PHP and MYSQL	5
25	Minor Project	1
26	Employability Skills	1
Total		20

Semester - 5		
S. No.	Name of the Subject	Credits
30	Internet of Things	4
31	NET Programming	5
32	Computer Graphics and Image Processing	4
33	Summer Internship	2
34	Major Project - I	6
35	Program Elective - I	4
36	Program Elective - II	4
Total		29
Semester - 5 (Program Elective 01)		
1	Cloud Computing	4
2	Data Mining	4
Semester - 5 (Program Elective 02)		
1	Software Testing and Tools	4
2	Advanced Database Management	4
Semester - 6		
S. No.	Name of the Subject	Credits
37	Indian Constitution	0
38	Data Security	4
39	Digital Marketing	2
40	Android Application Development	5
41	Major Project - II	6
42	Program Elective - III	4
Total		21
Semester - 6 (Program Elective 03)		
1	Artificial Intelligence	4
2	Wireless communication	4
Grand Total		128