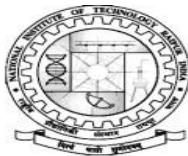


DEPARTMENT OF INFORMATION TECHNOLOGY
Scheme (Third Year)

National Institute of Technology Raipur												
Course of Study and Scheme of Examination							B. Tech. 5th Semester				Branch: IT	
S. No.	Subject Code	Subject Name	Periods per Week			TA	Examination Scheme				Total Marks	Credits
			L	T	P		MSE/MTR		ESE/ESVE			
							Theory	Prac.	Theory	Prac.		
1	Program Core (IT105101IT)	Design Analysis of Algorithms	3	1	0	20	30		50		100	4
2	Program Core (IT105102IT)	Computer Networks	3	1	0	20	30		50		100	4
3	Program Core (IT105103IT)	Data Mining	3	1	0	20	30		50		100	4
4	Program Elective (IT1052XXIT)	Program Elective – I (Reference Table 1)	3	0	0	20	30		50		100	3
5	Open Elective (IT1053XXIT)	Open Elective - I (Reference Table 2)	3	0	0	20	30		50		100	3
6	Laboratory (IT105401IT)	Design Analysis of Algorithms Lab	0	0	2	40		20		40	100	1
7	Laboratory (IT105402IT)	Computer Networks Lab	0	0	2	40		20		40	100	1
8	Internship (IT105701IT)	Summer Internship I	0	0	2	40		20		40	100	1
												21

Reference Table:1 (Program Elective-I)		
S. No.	Subject Code	Subject Name
1	IT105201IT	Information Theory and Coding
2	IT105202IT	Digital Signal Processing
3	IT105203IT	Microprocessor

Reference Table:2 (Open Elective-I)		
S. No.	Subject Code	Subject Name
1	IT105301IT	Digital Image Processing
2	IT105302IT	Advance Computer Architecture
3	IT105303IT	E- Business

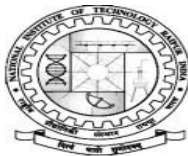


DEPARTMENT OF INFORMATION TECHNOLOGY
Scheme (Third Year)

National Institute of Technology Raipur												
Course of Study and Scheme of Examination							B. Tech. 6th Semester				Branch: IT	
S. No.	Subject Code	Subject Name	Periods per Week			TA	Examination Scheme				Total Marks	Credits
			L	T	P		MSE/MTR		ESE/ESVE			
							Theory	Prac.	Theory	Prac.		
1	Program Core (IT106101IT)	Compiler Design	3	1	0	20	30		50		100	4
2	Program Core (IT106102IT)	Artificial Intelligence	3	1	0	20	30		50		100	4
3	Program Core (IT106103IT)	Computer Graphics	3	1	0	20	30		50		100	4
4	Program Elective (IT1062XXIT)	Program Elective-II (Reference Table 3)	3	0	0	20	30		50		100	3
5	Open Elective (IT1063XXIT)	Open Elective-II (Reference Table 4)	3	0	0	20	30		50		100	3
6	Laboratory (IT106401IT)	Artificial Intelligence Lab	0	0	2	40		20		40	100	1
7	Laboratory (IT106402IT)	Computer Graphics Lab	0	0	2	40		20		40	100	1
												20

Reference Table:3 (Program Elective-II)		
S. No.	Subject Code	Subject Name
1	IT106201IT	Cryptography and Network Security
2	IT106202IT	Advanced Database Management System
3	IT106203IT	Cyber Law

Reference Table:4 (Open Elective-II)		
S. No.	Subject Code	Subject Name
1	IT106301IT	Machine Learning
2	IT106302IT	Graph Theory
3	IT106303IT	Computational Geometry

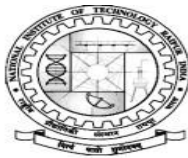


DEPARTMENT OF INFORMATION TECHNOLOGY
Scheme (Fourth Year)

National Institute of Technology Raipur												
Course of Study and Scheme of Examination							B. Tech. 7th Semester				Branch: IT	
S. No.	Subject Code	Subject Name	Periods per Week			TA	Examination Scheme				Total Marks	Credits
			L	T	P		MSE/MTR		ESE/ESVE			
							Theory	Prac.	Theory	Prac.		
1	Program Core (IT107101IT)	Internet of Things	3	1	0	20	30		50		100	4
2	Program Elective (IT1072XXIT)	Program Elective - III (Reference Table 5)	3	0	0	20	30		50		100	3
3	Program Elective (IT1072XXIT)	Program Elective - IV (Reference Table 5)	3	0	0	20	30		50		100	3
4	Open Elective (IT1073XXIT)	Open Elective - III (Reference Table 6)	3	0	0	20	30		50		100	3
6	Laboratory (IT107401IT)	Internet of Things Lab	0	0	2	40		20		40	100	1
7	Project Work (IT107501IT)	Project Work	0	0	2	40		20		40	100	4
8	Internship (IT107701IT)	Summer Internship II	0	0	2	40		20		40	100	2
											20	

Reference Table:5 (Program Elective-III & IV)		
S. No.	Subject Code	Subject Name
1	IT107201IT	Distributed Systems
2	IT107202IT	Text Mining
3	IT107203IT	Real Time System
4	IT107250IT	Adhoc & Sensor Network
5	IT107251IT	Principles of Programming Language
6	IT107252IT	Software Testing

Reference Table:6 (Open Elective-III)		
S. No.	Subject Code	Subject Name
1	IT107301IT	Neural Network and Fuzzy Logic
2	IT107302IT	Human Computer Interaction & Design
3	IT107303IT	Computer Vision



DEPARTMENT OF INFORMATION TECHNOLOGY
Scheme (Fourth Year)

National Institute of Technology Raipur												
Course of Study and Scheme of Examination							B. Tech. 8th Semester				Branch: IT	
S. No.	Subject Code	Subject Name	Periods per Week			TA	Examination Scheme				Total Marks	Credits
			L	T	P		MSE/MTR		ESE/ESVE			
							Theory	Prac.	Theory	Prac.		
1	Program Elective (IT1082XXIT)	Program Elective - V (Reference Table 7)	3	0	0	20	30		50		100	3
2	Program Elective (IT1082XXIT)	Program Elective - VI (Reference Table 7)	3	0	0	20	30		50		100	3
3	Open Elective (IT1083XXIT)	Open Elective - IV (Reference Table 8)	3	0	0	20	30		50		100	3
4	Open Elective (IT1083XXIT)	Open Elective - V (Reference Table 8)	3	0	0	20	30		50		100	3
												12

Reference Table:7 (Program Elective - V & VI)

S. No.	Subject Code	Subject Name
1	IT108201IT	Blockchain
2	IT108202IT	Medical Imaging
3	IT108203IT	Information Retrieval
4	IT108250IT	Cellular Mobile Computing
5	IT108251IT	High Performance Computing
6	IT108252IT	Software Defined Network

Reference Table:8 (Open Elective - IV & V)

S. No.	Subject Code	Subject Name
1	IT108301IT	Big Data Processing
2	IT108302IT	Cloud Computing
3	IT108303IT	Pattern Recognition
4	IT108350IT	Deep Learning
5	IT108351IT	Bioinformatics
6	IT108352IT	Decision Support System



DEPARTMENT OF INFORMATION TECHNOLOGY

Scheme (Fourth Year)

Eight Semester for Students Undergoing Major Internship

National Institute of Technology Raipur												
Course of Study and Scheme of Examination							B. Tech. 8th Semester				Branch: IT	
S. No.	Subject Code	Subject Name	Periods per Week			TA	Examination Scheme				Total Marks	Credits
			L	T	P		MSE/MTR		ESE/ESVE			
							Theory	Prac.	Theory	Prac.		
1	Open Elective (IT1083XXIT)	Open Elective - IV (Reference Table 8)	3	0	0	20	30		50		100	3
2	Open Elective (IT1083XXIT)	Open Elective - V (Reference Table 8)	3	0	0	20	30		50		100	3
3	Major Internship IT108703IT	Major Internship									200	$6 = (4^{\wedge} + 2^{\wedge\wedge})$
											Total Credits	12

[^]Mid-semester evaluation report and field evaluation report to be submitted by industry

^{^^}Report submission and presentation in the department