



Vidya Jyothi Institute of Technology

(An Autonomous Institution)

(Accredited by NAAC & NBA, Approved by AICTE New Delhi & Permanently Affiliated to JNTUH)

Aziz Nagar Gate, C.B. Post, Hyderabad-500 075

Department of Information Technology

COURSE STRUCTURE (R18)

I YEAR I SEMESTER

Subject Code	Subject Name	L	T	P/D	Total Credits
A21002	Mathematics-I	3	1	0	4.0
A21003	Applied Physics	3	1	0	4.0
A21201	Basic Electrical Engineering	3	0	0	3.0
A21301	Engineering Graphics & Modeling	1	0	3	2.5
A21501	Programming For Problem Solving-I	2	0	0	2.0
A21082	Applied Physics Lab	0	0	3	1.5
A21281	Basic Electrical Engineering Lab	0	0	2	1.0
A21081	English Language Skills Lab (ELSL)	0	0	2	1.0
A21581	Programming For Problem Solving Lab-I	0	0	2	1.0
TOTAL CREDITS					20

I YEAR II SEMESTER

Subject Code	Subject Name	L	T	P/D	Total Credits
A22005	English	2	0	0	2.0
A22006	Mathematics-II	3	1	0	4.0
A22008	Chemistry	3	1	0	4.0
A22502	Programming For Problem Solving-II	2	0	0	2.0
A22084	English Communication Skills Lab (ECSL)	0	0	2	1.0
A22086	Chemistry Lab	0	0	3	1.5
A22382	Engineering Workshop	0	1	3	2.5
A22582	Programming For Problem Solving Lab-II	0	0	2	1.0
TOTAL CREDITS					18



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II YEAR I SEMESTER

Subject Code	Subject Name	L	T	P/D	Total Credits
A23012	Probability and Statistics	3	0	0	3
A23405	Digital Logic Design	3	0	0	3
A23401	Electronic Devices & Circuits	3	0	0	3
A23504	Data Structures	3	0	0	3
A23505	Mathematical Foundations of Computer Science	3	0	0	3
A23506	Python Programming	3	0	0	3
A23583	Data Structures & Python Programming Lab	0	0	2	2
A23483	Digital Logic Design and Electronic Devices & Circuits Lab	0	0	2	2
A23MC2	Gender Sensitization / Cyber Laws	2	0	0	-
TOTAL CREDITS					20

II YEAR II SEMESTER

Subject Code	Subject Name	L	T	P/D	Total Credits
A24507	Design and Analysis of Algorithms	4	0	0	4
A24508	Computer Organization	3	0	0	3
A24509	Java Programming	3	0	0	3
A24510	Software Engineering	3	0	0	3
A24511	Database Management Systems	3	0	0	3
A24015	Professional Communications	2	0	0	2
A24584	Java Programming Lab	0	0	2	1
A24585	Database Management Systems lab	0	0	2	1
A24MC2	Environmental Science	2	0	0	-
TOTAL CREDITS					20



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III Year I Semester

Course Code	Course Title	L	T	P	Credits
A25512	Formal Languages and Automata Theory	3	0	0	3
A25513	Computer Networks	3	0	0	3
A25514	Operating Systems	3	0	0	3
A25016	Managerial Economics and Financial Analysis	3	0	0	3
A25519 A25517 A25518 A25520	Professional Elective - I 1. Cloud Computing 2. Linux Programming 3. Software Project Management 4. Computer Graphics	3	0	0	3
A25521 A25522 A25523	Open Elective - I 1. Basics of Operating Systems 2. Core Java Programming 3. Fundamentals of Computer Networks	3	0	0	3
A25586	Computer Networks & Operating Systems Lab	0	0	2	1
A25087	Advanced Communication Skills Lab	0	0	2	1
A25TP2/ A25TP1	Personality Development & Behavioral Skills/ Quantitative Methods & Logical Reasoning	2	0	-	1
TOTAL CREDITS					21

III Year II Semester

Course Code	Course Title	L	T	P	Credits
A26531	Web Technologies	3	0	0	3
A26524	Compiler Design	3	0	0	3
A26525	Data Warehousing & Data Mining	3	0	0	3
A26527	Object Oriented Analysis & Design	3	0	0	3
A26526 A26528 A26529 A26530	Professional Elective - II 1. Artificial Intelligence 2. Information Security 3. Software Testing Methodologies 4. Principles of Programming Languages	3	0	0	3
A26531 A26532 A26533	Open Elective - II 1. Database Management Systems 2. Software Engineering Fundamentals 3. Essentials of Python Programming	3	0	0	3
A26588	Data Mining & Case Tools Lab	0	0	2	1
A26589	Web Technologies Lab	0	0	2	1
A26TP2/ A26TP1	Quantitative Methods & Logical Reasoning/ Personality Development & Behavioral Skills	2	0	0	1
TOTAL CREDITS					21



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IV Year I Semester

Course Code	Course Title	L	T	P	Credits
A27534	Mobile Application Development	3	0	0	3
A27537	Internet of Things	3	0	0	3
A27536 A27539 A27538 A27547	Professional Elective - III Big Data Analytics Image Processing R Programming Data Science	3	0	0	3
A27543 A27541 A27540 A27542	Professional Elective - IV Machine Learning Block chain Technologies Advanced Databases Information Retrieval Systems	3	0	0	3
A27544 A27545 A27546	Open Elective - III 1. Web Design 2. Introduction to IoT 3. Fundamentals of Cyber Security	3	0	0	3
A27595	Mobile Application Development Lab & IoT Lab	0	0	2	1
A27591 A27594 A27593 A27596	Professional Elective Lab 1. Big Data Analytics Lab 2. Image Processing Lab 3. R Programming Lab 4. Data Science Lab	0	0	2	1
A275P1	Industry Oriented Mini Project	0	0	6	3
TOTAL CREDITS					20

IV Year II Semester

Course Code	Course Title	L	T	P	Credits
A28549	Semantic Web & Social Networks	3	0	0	3
A28548	E-Commerce	3	0	0	3
A285TS	Technical Seminar	0	0	4	2
A285CV	Comprehensive Viva-Voce	0	0	4	2
A285P2	Major Project	0	0	20	10
TOTAL CREDITS					20

L – Lecture

T – Tutorial

P – Practical

D – Drawing



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COURSE STRUCTURE (R15)

I YEAR I SEMESTER

Subject Code	Subject Name	L	T	P/D	Total Credits
A11001	English-I	2	0	0	2
A11002	Mathematics - I	4	1	0	3
A11003	Engineering Physics - I	3	1	0	3
A11502	C Programming - I	3	1	0	3
A11004	Engineering Chemistry	3	1	0	3
A11303	Engineering Graphics	2	0	3	3
A11081	English Language Communication Skills Lab - I	0	0	3	2
A11582	C Programming Lab- I	0	0	3	2
A11083	Engineering Physics and Chemistry Lab	0	0	3	2
A11583	IT Workshop	0	0	3	2
TOTAL CREDITS					25

I YEAR II SEMESTER

Subject Code	Subject Name	L	T	P/D	Total Credits
A12005	English-II	2	0	0	2
A12006	Mathematics – II	4	1	0	3
A12007	Engineering Physics-II	3	1	0	3
A12503	C Programming – II	3	1	0	3
A12009	Mathematics – III	3	1	0	3
A12203	Basic Electrical Engineering	3	1	0	3
A12085	English Language Communication Skills Lab - II	0	0	3	2
A12584	C Programming Lab - II	0	0	3	2
A12382	Engineering Workshop	0	0	3	2
TOTAL CREDITS					23



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II YEAR I SEMESTER

Subject Code	Subject Name	L	T	P/D	Total Credits
A13014	Probability & Statistics	3	1	0	3
A13504	Mathematical Foundations of Computer Science	3	1	0	3
A13505	Data Structures	4	1	0	4
A13406	Digital Logic Design	3	1	0	3
A13506	Object Oriented Programming	4	1	0	4
A13401	Electronic Devices & Circuits	3	1	0	3
A13585	Data Structures Lab	0	0	3	2
A13483	Electronic Devices & Circuits and Digital Logic Design Lab	0	0	3	2
A13MC3	Professional Communication	2	0	0	-
TOTAL CREDITS					24

II YEAR II SEMESTER

Subject Code	Subject Name	L	T	P/D	Total Credits
A14507	Design and Analysis of Algorithms	4	1	0	4
A14508	Computer Organization	3	1	0	3
A14509	Database Management Systems	3	1	0	4
A14510	Software Engineering	3	1	0	3
A14511	Java Programming	3	1	0	4
A14016	Environmental Science	2	1	0	2
A14586	Java Programming Lab	0	0	3	2
A14587	Database Management Systems lab	0	0	3	2
A14MC4	Professional Ethics Human Values and Self Development	2	0	0	-
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III YEAR I SEMESTER

Subject Code	Subject Name	L	T	P	Total Credits
A15512	Linux Programming	3	1	0	3
A15513	Computer Networks	3	1	0	3
A15514	Operating Systems	3	1	0	3
A15516	Cloud Computing	3	1	0	3
A15517 A15518 A15519	Professional Elective-I 1. Principles of Programming Languages 2. Human Computer Interaction 3. Software Project Management	3	1	0	3
A15520 A15521	Open Elective - I 1. Java Programming 2. Operating Systems	3	1	0	3
A15588	Operating Systems & Computer Networks lab through LINUX	0	0	3	2
A15089	Advanced Communication Skills Lab	0	0	3	2
A15TP2	Quantitative Methods & Logical Reasoning	2	1	0	2
TOTAL CREDITS					24

III YEAR II SEMESTER

Subject Code	Subject Name	L	T	P	Total Credits
A16522	Web Technologies	3	1	0	3
A16524	Automata & Compiler Design	3	1	0	3
A16525	Data Warehousing & Data Mining	3	1	0	3
A16018	Managerial Economics & Financial Analysis	3	1	0	3
A16526 A16527 A16528	Professional Elective-II 1. Object Oriented Analysis & Design 2. Distributed Systems 3. Information Retrieval Systems	3	1	0	3
A16529 A16530	Open Elective - II 1. Database Management System 2. Software Engineering	3	1	0	3
A16591	Web Technologies Lab	0	0	3	2
A16592	Data Mining & Case Tools Lab	0	0	3	2
A16TP1	Personality Development & Behavioural Skills	2	1	0	2
TOTAL CREDITS					24



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IV YEAR I SEMESTER

Subject Code	Subject Name	L	T	P	Total Credits
A17531	Mobile Application Development	3	1	0	3
A17532	Information Security	3	1	0	3
A17534	Software Testing Methodologies	3	1	0	3
A17535 A17537 A17536	Professional Electives-III 1.Big Data Analysis 2.Image Processing 3.Internet Of Things	3	1	0	3
A17538 A17539 A17540	Professional Electives-IV 1.Advanced Databases 2.Storage Area Networks 3.Computer Graphics	3	1	0	3
A17541 A17542	Open Electives-III 1. Information System For Engineers 2.Web Design	3	1	0	3
A17593	Mobile Application Development Lab	0	0	3	2
A17594 A17595 A17596	Professional Elective Lab 1. Hadoop & Big data Lab 2. Internet Of Things Lab 3. Image Processing With SCI Lab	0	0	3	2
A175P1	Mini Project	0	0	0	2
TOTAL CREDITS					24

IV YEAR II SEMESTER

Subject Code	Subject Name	L	T	P	Total Credits
A18543	Design Patterns	3	1	0	3
A18544	E-Commerce	3	1	0	3
A18545	Semantic Web and Social Networks	3	1	0	3
A185TS	Technical Seminar	0	0	6	2
A185CV	Comprehensive Viva-Voce	0	0	0	2
A185P2	Major Project	0	0	15	11
TOTAL CREDITS					24

L – Lecture

T – Tutorial

P – Practical

D – Drawing

Jawaharlal Nehru Technological University Hyderabad

Kukatpally, Hyderabad - 500 085, Telangana, India

COURSE STRUCTURE (R13)

Department of Information Technology

Course code	Course title	Total number of contact hours				Credits
		Lecture	Tutorial	Practical#	Total	
		(L)	(T)	(P)	hours	
I Year						
A10001	English	2	-	-	2	4
A10002	Mathematics – I	3	1	-	4	6
A10003	Mathematical Methods	3	1	-	4	6
A10004	Engineering Physics	2	1	-	3	4
A10001	Engineering Chemistry	2	-	-	2	4
A10501	Computer Programming and Data Structures	3	-	-	3	6
A10301	Engineering drawing	2	-	3	5	4
A10581	Computer programming Lab	-	-	3	3	4
A10081	Engineering physics/ Engineering Chemistry Lab	-	-	3	3	4
A10083	English language Communication Skills Lab	-	-	3	3	4
A10082	IT Workshop/ Engineering Workshop	-	-	3	3	4
II YEAR I SEM						
A30008	Probability and Statistics	3	1	-	4	3
A30504	Mathematical Foundation of Computer Science	3	1	-	4	3
A30502	Data Structures	4	1	-	5	4
A30402	Digital Logic Design & Computer Organization	4	1	-	5	4
A30404	Electronic Devices & Circuits	4	-	-	4	4
A30202	Basic Electrical Engineering	3	1	-	4	3
A30282	Electrical & Electronics lab	-	-	3	3	2
A30582	Data Structures Lab	-	-	3	3	2

Jawaharlal Nehru Technological University Hyderabad

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COURSE STRUCTURE (R13)

II YEAR II SEM						
A40511	Principles of Programming Languages	4	1	-	5	4
A40507	Database Management Systems	4	1	-	5	4
A40503	Java Programming	4	-	-	4	4
A40009	Environmental Studies	3	1	-	4	3
A40409	Data Communication	3	1	-	4	3
A40508	Design and Analysis of Algorithms	3	1	-	4	3
A40585	Java Programming Lab	-	-	3	3	2
A40584	Database Management Systems Lab	-	-	3	3	2
III YEAR I SEM						
A50513	Automata & Compiler Design	3	1	-	4	3
A50517	Linux programming	3	1	-	4	3
A50518	Software Engineering	3	1	-	4	3
A50510	Operating Systems	4	-	-	4	4
A50515	Computer Networks	4	1	-	5	4
A50010	Managerial Economics & Financial Analysis	4	1	-	5	4
A50589	Operating Systems Lab	-	-	3	3	2
A50588	Computer Networks Lab (Through Linux)	-	-	3	3	2
III YEAR II SEM						
A60512	Web Technologies	4	1	-	5	4
	Open Elective					
A60018	Human Values and professional Ethics					
A60017	Intellectual Property rights	3	1	-	4	3
A60117	Disaster Management					

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COURSE STRUCTURE (R13)

A60524	Object oriented Analysis and Design	3	1	-	4	3
A60520	Data Warehousing & Data Mining	4	1	-	5	4
A60525	Software testing Methodologies	4	1	-	4	4
A60519	Cloud computing	3	1	-	4	3
A60592	Data Mining& Web Technologies Lab	-	-	3	3	2
A60086	Advanced Communication skills Lab	-	-	3	3	2
IV YEAR I SEM						
A70522	Information Security	3	1	-	4	3
A70530	Design Patterns	4	-	-	4	4
A70535	Mobile Application Development	3	1	-	4	3
A70533	Information Retrieval Systems	4	1	-	5	4
A70541	Elective-I Wireless Networks & Mobile Computing					
A70532	Image Processing & Pattern Recognition	3	1	-	4	3
A70539	Soft Computing					
A70538	Semantic Web & Social Networks					
A70352	Operations Research					
A70540	Elective-II Software Project Management					
A70529	Computer Graphics	4	1	-	5	4
A70531	Human Computer Interaction					
A70537	Scripting Languages					

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COURSE STRUCTURE (R13)

A70528	Computer Forensics					
A70593	Case Tools & Software Testing Lab	-	-	3	3	2
A70597	Mobile Application Development Lab	-	-	3	3	2
IV YEAR II SEM						
A80014	Management Science	3	-	-	3	3
A80551	Elective - III Web Services					
A80544	E-Commerce	3	1	-	4	3
A80546	Middleware Technologies					
A80542	Ad-hoc& Sensor Networks					
A80547	Elective - IV Multimedia & Rich internet Applications					
A80526	Artificial Intelligence	3	1	-	4	3
A80550	Storage Area Networks					
A80542	Machine Learning					
A80087	Industry Oriented Mini Project	-	-	-	-	2
A80089	Seminar	-	6	-	6	2
A80088	Project Work	-	15	-	15	10
A80090	Comprehensive Viva	-	-	-	-	2