LEARNING IS SUPREME DEITY

PRAGATI ENGINEERING COLLEGE

(Autonomous)

(Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada and
Accredited by NAAC with "A+" Grade; Recognized by UGC under 2(f) and 12 (b))
ADB Road, Surampalem – 533437, Kakinada District, A.P.

R23

Department of Information Technology

BOS Approved Course Structure and Syllabus III B.Tech I & II Semesters

1. Welcome Address by BoS-Chairman
2. Ratification of III-year course structure and syllabi of R-23 regulation for B.Tech program
3. Discussion of Ratification of Course Objectives, Course Outcomes, and CO- PO mapping for each course
4. Finalization of text books and reference books
5. Ratification of interdepartmental courses offered by IT department of R-23 regulation for III year
6. Discussion of Ratification of new courses
7. Inclusion of MOOCs courses in Program Elective approved by BoS
8. Discussion of Action Taken Report from stakeholders
9. Any other item

Minutes of Tenth BoS Meeting conducted on 12-08-2025

RESOLUTIONS:

1. WRT to Point No. 2 of Agenda-

III-year course structure and syllabi of R-23 regulation for B.Tech program is ratified.

2. WRT to Point No. 3 of Agenda -

1. III B.Tech I Semester – "Advanced Java" , Course Objective 3 to be revised from "Will increase ability in web application development" to "Increase ability in web application development".

2. III B.Tech II Semester – "Software Testing Methodologies", the Bloom's Taxonomy level of CO4 to be revised from K5 to K3. Accordingly, CO4 to be modified from "Design test cases using path products, regular expressions, and logic-based testing methods" to "Implement test cases using path products, regular expressions, and logic-based testing methods".

3. III B.Tech II Semester – "Augmented Reality & Virtual Reality", the Bloom's Taxonomy level of CO3 to be revised from K5 to K4. Accordingly, CO3 to be modified from "Design interaction methods and software architectures" to "Analyze interaction methods and evaluate alternative software architectures".

4. III B.Tech II Semester – "Software Project Management", the Bloom's Taxonomy level of CO4 to be revised from K5 to K3. Accordingly, CO4 to be modified from "Develop project plans and organizational structures" to "Prepare project plans and organizational structures".

3. WRT to Point No. 4 of Agenda -

The Members reviewed and ratified the text books and reference books offered by IT department of R-23 regulation for III year.

4. WRT to Point No. 5 of Agenda -

The Members ratified the interdepartmental courses offered by IT department of R-23 regulation for III year.

5. WRT to Point No. 6 of Agenda -

The Members ratified the new courses offered by IT department of R-23 regulation for III year.

6. WRT to Point No. 7 of Agenda -

The members ratified the 12-Week SWAYAM NPTEL (MOOCs) courses offered by the IT Department under the R-23 regulation for III Year. It was further ratified that the BoS Chairman is authorized to shortlist or select the courses in the Swayam NPTEL(MOOCs) list.

7. WRT to Point No. 8 of Agenda -

Based on the ATR, the suggestions given by the stakeholders are included

a) "Entrepreneurship and Venture Creation" course has been introduced in III B.Tech I Semester as an Open Elective.

b) "Salesforce" course has been incorporated into the regular curriculum as a Skill Enhancement Course, with Salesforce Administrator Explorer offered in III B.Tech I Semester and Salesforce Developer Catalyst offered in III B.Tech II Semester.

The meeting ended with Vote of Thanks.

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DEPARTMENT OF INFORMATION TECHNOLOGY

S.No.	Name	Signature
1	Mr. G Satya Mohan Chowdary (Chairman) Asst. Professor & HOD – Dept. of IT	
2	Dr. S Surekha Asst. Professor, Dept. of CSE, UCEK, JNTUK, Kakinada	S. Surekha 20/08/2025
3	Dr. R B V Subramanyam Professor, Dept of CSE, NIT Warangal	Approved through Online
4	Dr. Manas Ranjan Patra Professor & HOD – Dept. of CS Berhampur University, Berhampur, Odisha	Approved through online
5	Mr. D Konda Babu Asst. Professor, Dept. of IT	

R23 COURSE STRUCTURE

III YEAR – I SEMESTER

S.No.	Category	Title	L	T	P	C
1	Professional Core	Advanced Java	3	0	0	3
2	Professional Core	Computer Networks	3	0	0	3
3	Professional Core	Automata Theory and Compiler Design	3	0	0	3
4	Professional Elective - I	1. Object Oriented Analysis and Design 2. Cyber Security 3. Artificial Intelligence 4. Microprocessors and Microcontrollers 5. Data Warehousing and Data Mining 6. Any one of 12-Week Swayam NPTEL (MOOCs) * i. Privacy and Security in Online Social Media ii. Social Network Analysis iii. Foundations of Virtual Reality	3	0	0	3
5	Open Elective-I	1. Construction Project Management 2. Renewable Energy Sources 3. Sustainable Energy Technologies 4. Electronic Devices and Circuits 5. Entrepreneurship and Venture Creation	3	0	0	3
6	Professional Core	Advanced Java Laboratory	0	0	3	1.5
7	Professional Core	Computer Networks Laboratory	0	0	3	1.5
8	Skill Enhancement course	Full Stack Development 1 / Salesforce Administrator Explorer	0	1	2	2
9	Engineering Science	User Interface Design using Flutter/ SWAYAM Plus - Android Application Development (with Flutter)	0	0	2	1
10	Community Service Project Internship		-	-	-	2
	Total Credits		15	1	10	23

* BoS Chairman is authorized to shortlist or select the courses in the Swayam NPTEL(MOOCs) list.

Members of BoS:

	Approved through Online	Approved through online		
Dr. S Surekha, JNTUK	Dr. R B V Subrahmanyam, NIT-W	Dr. Manas Ranjan Patra, Berhampur University	Mr. Satya Mohan Chowdary G, BoS-Chairman	Mr. D Konda Babu, Assistant Professor

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III YEAR – II SEMESTER

S.No.	Category	Title	L	T	P	C
1	Professional Core	Cloud Computing	3	0	0	3
2	Professional Core	Cryptography and Network Security	3	0	0	3
3	Professional Core	Machine Learning	3	0	0	3
4	Professional Elective–II	1. Software Testing Methodologies 2. Augmented Reality and Virtual Reality 3. DevOps 4. Generative AI 5. Any one of 12-Week Swayam NPTEL (MOOCs)* i. Responsible and Safe AI Systems ii. Cyber Security and Privacy iii. Parameterized Algorithms	3	0	0	3
5	Professional Elective–III	1. Software Project Management 2. Mobile Adhoc Networks 3. Natural Language Processing 4. Distributed Operating System 5. Any one of 12-Week Swayam NPTEL (MOOCs)* i. Advanced Distributive Systems ii. Mathematical Foundations of Machine Learning iii. Reinforcement Learning	3	0	0	3
6	Open Elective – II	1. Disaster Management 2. Additive Manufacturing 3. Principles of Communications 4. Fundamentals of Electric Vehicles	3	0	0	3
7	Professional Core	Cloud Computing Laboratory	0	0	3	1.5
8	Professional Core	Machine Learning Laboratory	0	0	3	1.5
9	Skill Enhancement course	Soft skills / SWAYAM Plus - 21st Century Employability Skills / Salesforce Developer Catalyst	0	1	2	2
10	Audit Course	Technical Paper Writing and IPR	2	0	0	-
	Total Credits		20	1	8	23

Mandatory Industry Internship of 08 weeks duration during summer vacation

* BoS Chairman is authorized to shortlist or select the courses in the Swayam NPTEL(MOOCs) list.

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Dr. S Surekha, JNTUK	Dr. R B V Subrahmanyam, NIT-W	Dr. Manas Ranjan Patra, Berhampur University	Mr. Satya Mohan Chowdary G, BoS-Chairman	Mr. D Konda Babu, Assistant Professor