



Sri Indu Institute of Engineering & Technology

Recognized Under 2(f) of UGC Act 1956

Approved by AICTE, New Delhi
Affiliated to JNTUH, Hyderabad.

COURSE FILE

ON

SOFTWARE ENGINEERING

Course Code - CS502PC

III B. Tech

I-SEMESTER

A.Y.: 2022-2023

Prepared by

Ms.S. ANITHA

Assistant Professor

B. Rakha Kaul
Computer Science & Engg. Dept.
SRI INDU INSTITUTE OF ENGG & TECH.
Sheriguda(V), Ibrahimpatnam(M), R.R.Dist-501 10.


PRINCIPAL
Sri Indu Institute of Engineering & Tech.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.

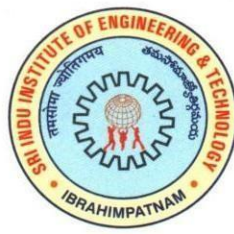


DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Academic Year	2022-2023
Course Title	SOFTWARE ENGINEERING
Course Code	CS502PC
Programme	B.Tech
Year & Semester	III year I-semester
Branch & Section	CSE-B
Regulation	R18
Course Faculty	Ms. S.ANITHA, Assistant Professor

Index of Course File

S. No.	Name of the content
1	Institute vision and mission
2	Department vision and mission /PEO
3	POs /PSOs
4	Course Syllabus with Structure
5	Course Outcomes (CO)
6	Mapping CO with PO/PSO; Course with PO/PSO with Justification
7	Academic Calendar
8	Time table - highlighting your course periods including tutorial
9	Lesson plan with number of hours/periods, TA/TM, Text/Reference book
10	Web references
11	Lecture notes
12	List of Power point presentations / Videos
13	University Question papers
14	Internal Question papers, Key with CO and BT
15	Assignment Question papers mapped with CO and BT
16	Result Analysis to identify weak and advanced learners - 3 times in a semester
17	Result Analysis at the end of the course
18	Remedial class for weak students - schedule and evidences
19	Advance Learners- Engagement documentation
20	CO, PO/PSO attainment sheets
21	Attendance register (Theory/Tutorial/Remedial) - Teacher/Course delivery record; Continuous evaluation
22	Course file (Digital form)



Sri Indu Institute of Engineering & Technology

Recognized Under 2(f) of UGC Act 1956

Approved by AICTE, New Delhi

Affiliated to JNTUH, Hyderabad.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

INSTITUTE VISION AND MISSION

Vision:

To become a premier institute of academic excellence by providing the world class education that transforms individuals into high intellectuals, by evolving them as empathetic and responsible citizens through continuous improvement.

Mission:


IM1: To offer outcome-based education and enhancement of technical and practical skills.

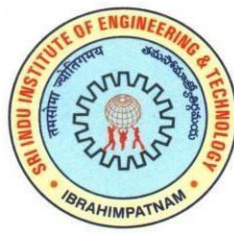
IM2: To continuous assess of teaching-learning process through institute-industry collaboration.

IM3: To be a center of excellence for innovative and emerging fields in technology development with state-of-art facilities to faculty and student's fraternity.

IM4: To create an enterprising environment to ensure culture, ethics and social responsibility among the stakeholders

B. Ravi Kaul
Computer Science & Engg. Dept.
SRI INDU INSTITUTE OF ENGG & TECH.
Sheriguda(V), Ibrahimpatnam(M), R.R. Dist-501 10.


PRINCIPAL
Sri Indu Institute of Engineering & Tech.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



Sri Indu Institute of Engineering & Technology

Recognized Under 2(f) of UGC Act 1956

Approved by AICTE, New Delhi

Affiliated to JNTUH, Hyderabad.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DEPARTMENT VISION AND MISSION

Vision:

To become a prominent knowledge hub for learners, strive for educational excellence with innovative and industrial techniques so as to meet the global needs.

Mission:

- DM1 :** To provide ambience that enhances innovations, problem solving skills, leadership qualities, decision making, team-spirit and ethical responsibilities.
- DM2 :** To impart quality education with professional and personal ethics, so as to meet the challenging technological needs of the industry and society.
- DM3 :** To provide academic infrastructure and develop linkage with the world class organizations to strengthen industry-academia relationships for learners.
- DM4 :** To provide and strengthen new concepts of research in the thrust area of Computer Science and Engineering to reach the needs of Government and Society.

B. Renuka Kaul
Computer Science & Engg. Dept.
SRI INDU INSTITUTE OF ENGG & TECH.
Sheriguda(V), Ibrahimpatnam(M), R.R. Dist-501 1C.


PRINCIPAL
Sri Indu Institute of Engineering & Tech.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



Sri Indu Institute of Engineering & Technology

Recognized Under 2(f) of UGC Act 1956

Approved by AICTE, New Delhi

Affiliated to JNTUH, Hyderabad.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES

- PEO1:** To develop trained graduates with strong academic and technical skills of modern computer science and engineering.
- PEO2:** To promote trained graduates with leadership qualities and the ability to solve real time problems using current techniques and tools in interdisciplinary environment.
- PEO3:** To motivate the graduates towards lifelong learning through continuing education and professional development.

PROGRAM SPECIFIC OUTCOMES

- PSO1 : Professional Skills:** To implement computer programs of varying complexity in the areas related to Web Design, Cloud Computing, Network Security and Artificial Intelligence.
- PSO2: Problem-Solving Skills:** To develop quality products using open ended programming environment.

B. Renuka Kaur
Computer Science & Engg. Dept.
SRI INDU INSTITUTE OF ENGG & TECH.
Sheriguda(V), Ibrahimpatnam(M), R.R.Dist-501 1C.


PRINCIPAL
Sri Indu Institute of Engineering & Tech.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



PROGRAMME OUTCOMES (POs)

- PO1: Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2: Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3: Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- PO6: The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7: Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11: Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12: Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B.Tech in COMPUTER SCIENCE AND ENGINEERING****III YEAR COURSE STRUCTURE AND SYLLABUS (R18)****Applicable from 2018-19 Admitted Batch****III YEAR I SEMESTER**

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS501PC	Formal Languages & Automata Theory	3	0	0	3
2	CS502PC	Software Engineering	3	0	0	3
3	CS503PC	Computer Networks	3	0	0	3
4	CS504PC	Web Technologies	3	0	0	3
5	CS515PE	Principles of Programming Languages(PE-I)	3	0	0	3
6		Professional Elective -II	3	0	0	3
7	CS505PC	Software Engineering Lab	0	0	3	1.5
8	CS506PC	Computer Networks & Web Technologies Lab	0	0	3	1.5
9	EN508HS	Advanced Communication Skills Lab	0	0	2	1
10	*MC510	Intellectual Property Rights	3	0	0	0
		Total Credits	21	0	8	22

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS601PC	Machine Learning	3	1	0	4
2	CS602PC	Compiler Design	3	1	0	4
3	CS603PC	Design and Analysis of Algorithms	3	1	0	4
4		Professional Elective – III	3	0	0	3
5		Open Elective-I	3	0	0	3
6	CS604PC	Machine Learning Lab	0	0	3	1.5
7	CS605PC	Compiler Design Lab	0	0	3	1.5
8		Professional Elective-III Lab	0	0	2	1
9	*MC609	Environmental Science	3	0	0	0
		Total Credits	18	3	8	22

***MC - Environmental Science – Should be Registered by Lateral Entry Students Only.**

Note: Industrial Oriented Mini Project/ Summer Internship is to be carried out during the summer vacation between 6th and 7th semesters. Students should submit report of Industrial Oriented Mini Project/ Summer Internship for evaluation.

Professional Elective-I

CS511PE	Information Theory & Coding
CS512PE	Advanced Computer Architecture
CS513PE	Data Analytics
CS514PE	Image Processing
CS515PE	Principles of Programming Languages

Professional Elective - II

CS521PE	Computer Graphics
CS522PE	Advanced Operating Systems
CS523PE	Informational Retrieval Systems
CS524PE	Distributed Databases
CS525PE	Natural Language Processing

Course Objectives:

1. The aim of the course is to provide an understanding of the working knowledge of the techniques for estimation, design, testing and quality management of large software development projects.
2. Topics include process models, software requirements, software design, software testing, software process/product metrics, risk management, quality management and UML diagrams

Course Outcomes:

1. Ability to translate end-user requirements into system and software requirements, using e.g. UML, and structure the requirements in a Software Requirements Document (SRD).
2. Identify and apply appropriate software architectures and patterns to carry out high level design of a system and be able to critically compare alternative choices.
3. Will have experience and/or awareness of testing problems and will be able to develop a simple testing report

UNIT - I

Introduction to Software Engineering: The evolving role of software, changing nature of software, software myths. **A Generic view of process:** Software engineering- a layered technology, a process framework, the capability maturity model integration (CMMI), process patterns, process assessment, personal and team process models.
Process models: The waterfall model, incremental process models, evolutionary process models, the unified process.

UNIT - II

Software Requirements: Functional and non-functional requirements, user requirements, system requirements, interface specification, the software requirements document.
Requirements engineering process: Feasibility studies, requirements elicitation and analysis, requirements validation, requirements management.
System models: Context models, behavioral models, data models, object models, structured methods.

UNIT - III

Design Engineering: Design process and design quality, design concepts, the design model. **Creating an architectural design:** software architecture, data design, architectural styles and patterns, architectural design, conceptual model of UML, basic structural modeling, class diagrams, sequence diagrams, collaboration diagrams, use case diagrams, component diagrams.

UNIT - IV

Testing Strategies: A strategic approach to software testing, test strategies for conventional software, black-box and white-box testing, validation testing, system testing, the art of debugging.
Product metrics: Software quality, metrics for analysis model, metrics for design model, metrics for source code, metrics for testing, metrics for maintenance.

UNIT - V

Metrics for Process and Products: Software measurement, metrics for software quality.

Risk management: Reactive Vs proactive risk strategies, software risks, risk identification, risk projection, risk refinement, RMMM, RMMM plan.

Quality Management: Quality concepts, software quality assurance, software reviews, formal technical reviews, statistical software quality assurance, software reliability, the ISO 9000 quality standards.

TEXT BOOKS:

1. Software Engineering, A practitioner's Approach- Roger S. Pressman, 6th edition, Mc Graw Hill International Edition.
2. Software Engineering- Sommerville, 7th edition, Pearson Education.
3. The unified modeling language user guide Grady Booch, James Rumbaugh, Ivar Jacobson, Pearson Education.

REFERENCES:

1. Software Engineering, an Engineering approach- James F. Peters, Witold Pedrycz, John Wiley.
2. Software Engineering principles and practice- Waman S Jawadekar, The Mc Graw-Hill Companies.
Fundamentals of object-oriented design using UML Meiler page-Jones: Pearson Education



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

Department of Computer Science and Engineering

Course Outcomes

Class: III – I SEM – B - Section

After completing this course the student will be able to:

Course Name : Software Engineering	Course Code: C312	Year – Sem: III-I	Academic Year: 2022-2023
CO Number	Course Outcomes (CO)		
C312.1	Determine the identity of minimum requirements for the development of application. (Knowledge)		
C312.2	Describe to develop functional and non -functional requirements for srs document. (Analysis)		
C312.3	Ability to design software architecture, component level design and performing user interface design. (Analysis)		
C312.4	Ability to identify a strategic approach to software testing and software quality for s/w product. (Application)		
C312.5	Describe to develop validation, system testing and art of debugging. (Knowledge)		
C312.6	Ability to maintain, efficient, reliable and cost effective software solutions. (Knowledge)		

Mapping of course outcomes with program outcomes:

High -3

Medium -2

Low-1

PO/PSO/ CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C312.1	3	-	-	-	-	-	-	-	-	-	-	3	1	-
C312.2	3	2	-	-	-	-	-	-	-	-	-	3	-	-
C312.3	3	-	2	-	-	-	-	-	-	-	-	3	-	-
C312.4	3	-	-	-	1	-	-	-	-	-	-	3	1	-
C312.5	2	-	-	-	1	-	-	-	-	-	-	3	2	2
C312.6	3	2	-	-	-	-	-	-	-	-	-	3	1	-
C313	2.8	2	1.7	-	2	-	-	-	-	-	-	2.8	-	-



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

CO-PO Mapping Justification

C312.1 Determine the identity of minimum requirements for the development of application. (Knowledge)

	Justification
PO1	Apply the gained knowledge where, the software requirements are in the need to develop the working applications.(level 3)
PO12	Recognize the need of software requirements engineering concepts in the abrupt changes in current technology. (Level 2)
PSO1	Apply the gained knowledge in new requirement configuration under the software domain. (Level 1)

C312.2 Describe to develop functional and nonfunctional requirements for SRS document. (Analysis)

	Justification
PO1	Apply the gained knowledge where, the software is in the need to develop the functional and non functional requirements in document.(level 3)
PO2	Students can able to learn software based on the requirement. (Level 1)
PO12	Its encourage the independent learning of new technology in software requirement document (level 2)

C312.3 Ability to design software architecture, component level design and performing user interface design. (Analysis)

	Justification
PO1	Knowledge of design various component levels performing in architecture design. (level 3)
PO3	Demonstrate the current technology in the software engineering design. (level 1)
PO12	It will enlightening the learners to adopting the technology changes by lifelong learning. (level 2)

C312.4 Ability to identify a straighttagic approach to software testing and software quality for s/w product. (Application)

	Justification
PO1	Apply the knowledge of straighttagic approach to software testing quality. (level 3)
PO5	Learning of software engineering gives the research and development focus to the students. (level 1)
PO12	Enlighten the research knowledge and supports for lifelong learning to the advanced learners. (level 1)
PSO1	Apply the gained knowledge in new requirement configuration under the software domain. (Level 1)

C312.5 Describe to develop validation, system testing and art of debugging. (Knowledge)

	Justification
PO1	Apply the knowledge of debugging techniques for system testing. (level 3)
PO5	Learning of development requirements gives the research and development focus to the students. (level 1)
PO12	Enlighten the research knowledge and supports for lifelong learning to the advanced learners. (level 1)
PSO1	Apply the gained knowledge in new requirement configuration under the software domain. (Level 1)
PSO2	Students can able to learn software based on the requirement. (Level 1)

C312.6 Ability to maintain, efficient, reliable and cost effective software solutions. (Knowledge)

	Justification
PO1	Apply the gained knowledge where, the software solutions maintain effectiveness of cost are in the need to develop the software.(level 3)
PO2	Students can able to setup software based on the requirement. (Level 1)
PO12	Its encourage the independent learning of new technology in software solutions. (level 2)
PSO1	Apply the gained knowledge in new requirement configuration under the software domain.(Level 1)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

ACADEMIC CALENDAR 2022-23

B. Tech./B. Pharm. III YEAR I & II SEMESTERS

I SEM

S. No	Description	Duration	
		From	To
1	Commencement of I Semester classwork	09.09.2022	
2	1 st Spell of Instructions (including Dussehra Recess)	09.09.2022	10.11.2022 (9 Weeks)
3	Dussehra Recess	03.10.2022	08.10.2022 (1 Week)
4	First Mid Term Examinations	11.11.2022	17.11.2022 (1 Week)
5	Submission of First Mid Term Exam Marks to the University on or before	24.11.2022	
6	2 nd Spell of Instructions	18.11.2022	12.01.2023 (8 Weeks)
7	Second Mid Term Examinations	16.01.2023	21.01.2023 (1 Week)
8	Preparation Holidays and Practical Examinations	23.01.2023	28.01.2023 (1 Week)
9	Submission of Second Mid Term Exam Marks to the University on or before	30.01.2023	
10	End Semester Examinations	30.01.2023	11.02.2023 (2 Weeks)

Note: No. of Working/ instructional days: 92

II SEM

S. No	Description	Duration	
		From	To
1	Commencement of II Semester classwork	13.02.2023	
2	1 st Spell of Instructions	13.02.2023	08.04.2023 (8 Weeks)
3	First Mid Term Examinations	10.04.2023	15.04.2023 (1 Week)
4	Submission of First Mid Term Exam Marks to the University on or before	22.04.2023	
5	2 nd Spell of Instructions (including Summer Vacation)	17.04.2023	24.06.2023 (10 Weeks)
6	Summer Vacation	15.05.2023	27.05.2023 (2 Weeks)
7	Second Mid Term Examinations	26.06.2023	01.07.2023 (1 Week)
8	Preparation Holidays and Practical Examinations	03.07.2023	08.07.2023 (1 Week)
9	Submission of Second Mid Term Exam Marks to the University on or before	08.07.2023	
10	End Semester Examinations	10.07.2023	22.07.2023 (2 Weeks)

Note: No. of Working/ instructional days: 90


REGISTRAR



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siet.ac.in/>

TIME TABLE FOR A.Y 2022-23

Class: III-B. Tech CSE -B

Semester: I

LH. NO: A-202

W.E.F:09-09-2022

Period/ Day	1	2	3	4	1:00- 1:30	5	6	7
	9:40-10:30	10:30-11:20	11:20-12:10	12:10-1:00		1:30-2:20	2:20-3:10	3:10-4:00
Monday	PPL	SE	INT	CN	L U N C H	DDB	FLAT	IPR
Tuesday	FLAT	LIB	SE	PPL		ACS LAB(BATCH-I)/SE LAB(BATCH-II)		
Wednesday	DDB	SE	COUN	FLAT		WT	CO-C/SS/DAA	
Thursday	CN	FLAT	DDB	PPL		CN&WT LAB(BATCH-I)/ACS LAB(BATCH-II)		
Friday	WT	CN&WT LAB(BATCH-II)/SE LAB(BATCH-I)				CN	FLAT	IPR
Saturday	SE	CN	WT			IPR	PPL	SPORTS

(T) – Tutorial (concern faculty)

Subject Code	Subject Name	Name of the Faculty	Subject Code	Subject Name	Name of the Faculty
CS501PC	Formal Language & Automata Theory	Mrs.R.Sravanthi	EN508HS	Advanced Communication Skills Lab	Mrs E Prarthana
CS502PC	Software Engineering	Ms.S.Anitha	MC510	Intellectual Property Rights	Mr Sannala Srinivas
CS503PC	Computer Networks	Mrs.N.Shilpa		CO-C/SS/DAA/ Fundamentals of AI	Ms.S.Anitha
CS504PC	Web Technologies	Mr. Jalli Anandarao	Sports	Sports	Mr.A.Vijay Kumar
CS505PC	Software Engineering Lab	Ms.S.Anitha/ Mrs.P.Swathi/ Mrs.E.Rupa	Internet	Internet	Mrs.N.Shilpa
CS506PC	Computer Networks& Web Technologies Lab	Mrs.N.Shilpa/ Mr. Jalli Anandarao / Mr.A.Vijay Kumar	LIB	Library	Mrs.E.Rupa
CS515PE	Principal of Programming languages	Mrs.E.Rupa	COUN	Counselling	Mr.A.Vijay Kumar
CS524PE	Distributed Databases	Ms.K Mounika	CS504PC	Web Technologies	Mr M Dattatreya Goud(Adjunct)
Class In-Charge : Ms.S.Anitha		Mentor 1 : Ms.S.Anitha		Mentor 2: Mrs.R.Sravanthi	

Anitha
Class In-Charge

[Signature]
HOD

[Signature]
PRINCIPAL



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

LESSON PLAN

Course Title	Software Engineering
Course Code	CS502PC
Programme	B.Tech
Year & Semester	III-year I-semester
Regulation	R18
Course Faculty	Ms.S.ANITHA, Assistant Professor , CSE

LectureNo.	Topics to be covered	TA/ TM	Reference
UNIT-I	Introduction to Software Engineering	BB	T2,
1.			
2	The Evolving Role of Software	BB	T2
3	Changing nature of s/w, legacy Generic view of process Software engineering-A layered technology	BB,	T1, T2
4	Generic view of A process framework, CMMI, Process Patterns Process Assessment, personal and team process models.	PPT,WR1	T2
5	Process models: The waterfall model, Incremental process models, Evolutionary process models.	PPT,WR2	T2
6	The unified process	BB	T1
UNIT-II	S/W Requirements: Functional and non-functional requirements	BB,	T1 & T2
7.			
8	User Requirements, System requirements	PPT	T2
9	Interface specification	PPT	T1
10	S/w Requirements document	BB,	T1
11	Requirement engineering process: Feasibility studies	BB , PPT	T1
12	Requirement Elicitation & Analysis, Requirements validation, Requirements management.	PPT	T1
13	System models: Context models, Behavioral models, Data models and object models	BB	T1
14	Structured methods	BB	T1 & T2
UNIT-III	Design engineering: Design Process And Design	BB	T1 & T2
15			

16	Design concepts,UML	BB,WR3	T1 & T2
17	Design model	BB	T1 & T2
18	Pattern based software design	BB, PPT	T1 & T2
19	Creating an Architectural design, Software architecture	BB	T1
20	Data design, Architectural Styles and patterns	PPT	T1
21	Assessing alternative architectural Designs, mapping data flow into software architecture	BB	T2
UNIT-IV 22	Modeling component-level design: Designing class-based components	BB	T1
23	Conducting component-level design	PPT	T1
24	object constraint language, designing conventional components.	PPT	T2
25	Performing User interface design: Golden rules, User interface analysis and design	BB	T2
26	Interface analysis, interface design steps, Design evaluation..	PPT	T2
27	Testing Strategies: A strategic approach to software testing, test strategies for conventional software,	PPT	T2
28	Black-Box and White-Box testing, Validation testing, System testing, the art of Debugging.	PPT	T2
29	Product metrics: Software Quality, Frame work for Product metrics, Metrics for Analysis Model.	BB	T2
30	Metrics for Design Model, Metrics for source code, Metrics for testing, Metrics for maintenance.	BB	T2
UNIT-V 31	Metrics for Process and Products: Software Measurement, Metrics for software quality.	PPT	T2
32	Risk management: Reactive vs. Proactive Risk strategies, software risks, Risk identification	BB	T2
33	Risk projection, Risk refinement, RMMM, RMMM Plan.	BB	T2
34	Quality Management: Quality concepts, Software quality assurance, Software Reviews	BB	T2
35	Formal technical reviews, Statistical Software quality Assurance, Software reliability, The ISO 9000 quality standards	BB	T2

TEXT BOOKS

T1. “Software engineering a practitioner’s Approach, Roger. Pressman”, sixth edition

T2. McGraw-Hill Edition. Software Engineering, Ian Somerville, seventh edition, Pearson education.

REFERENCE BOOKS

1. Software Engineering, A practitioner’s Approach, Pankaj Jabot, Wiley India, 2010.
2. Software Engineering A Primer, Waman S Jawadekar, Tata McGrawHill, 2008.
3. Fundamentals of Software Engineering, Rajib Mall, PHI, 2005.

WEB REFERENCES

WR1 <https://www.geeksforgeeks.org/capability-maturity-model-integration-cmmi/>

WR2 https://www.tutorialspoint.com/sdlc/sdlc_waterfall_model.htm

WR3 <https://economictimes.indiatimes.com/definition/uml>



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

LECTURE NOTES

UNIT-1-5 Link:

<https://drive.google.com/file/d/1SrZ6-ptvBIDDzeDmpeaiebR7-cdtbM28/view?usp=sharing>

Power Point Presentation Unit Wise Links:

Unit-I Link:

<https://drive.google.com/file/d/1iTWKo2idOEhun4kzdQZJ1Okk58OGVyhB/view?usp=sharing>

Unit-II Link:

https://drive.google.com/file/d/1OkZ_Rr1Pq_WBMg6oJKi5b28xNzWDF4ej/view?usp=sharing

Unit-III Link:

<https://drive.google.com/file/d/1nNHKo8zGywIVcsrzo5A5bO1eVy2RfP7w/view?usp=sharing>

Unit-IV Link:

<https://drive.google.com/file/d/1UP1FxIMj4v7rUmRT3rnBYMCGZPjrl3Xy/view?usp=sharing>

Unit-V Link:

<https://drive.google.com/file/d/1leul8EJVe9thAGN0WecxOoagl3DuBGk8/view?usp=sharing>

Code No: 155DB

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech III Year I Semester Examinations, September - 2021****SOFTWARE ENGINEERING****(Common to CSE, IT)****Time: 3 Hours****Max. Marks: 75****Answer any five questions
All questions carry equal marks**

- 1.a) Explain about evaluation of software engineering methodologies.
- b) What are the challenges of software engineering? [8+7]
- 2.a) Explain Software development process models.
- b) Write a short note on Waterfall model. [7+8]
- 3.a) Explain the importance of software specification of requirements.
- b) Write a short note on Context Model. [7+8]
4. Describe various prototyping techniques and discuss on object oriented analysis and modeling. [15]
5. Briefly explain about the following:
 - a) Sequence diagram
 - b) Use case diagram. [7+8]
6. What are the design principles of a good software design? Explain. [15]
- 7.a) What is testing? How is it different from debugging?
- b) Explain various structural testing techniques with suitable examples. [7+8]
- 8.a) List and explain the various software quality factors.
- b) Describe the role of software reviews in achieving good quality software. [7+8]

R18

Code No: 155DB

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, March - 2021

SOFTWARE ENGINEERING

(Common to CSE, IT)

Time: 3 Hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

- 1.a) Explain Software development process models.
- b) Explain about evaluation of software engineering methodologies. [7+8]
- 2.a) What is the goal of requirements analysis phase? Give reasons why the requirements analysis phase is a difficult one.
- b) Identify and briefly describe four types of requirement that may be defined for a computer based system. [8+7]
3. What are the design principles of a good software design? Explain. [15]
4. What is black box testing? Is it necessary to perform this? Explain various test activities. [15]
- 5.a) Discuss briefly about Pro-active and Re-active Risk strategies in detail.
- b) Explain about Software risks in detail. [8+7]
- 6.a) How system modeling is achieved using UML? Explain with a suitable example.
- b) How we perform design evaluation? Explain it with suitable example. [8+7]
- 7.a) What is a change? How it can be incorporated in the software.
- b) What is the difference between verification and validation? Explain with an example. [8+7]
- 8.a) What is software maintenance? How to control maintenance cost.
- b) Define software. List and explain about the elements of a software process. [8+7]

---ooOoo---

Sri Indu Institute of Engineering & Technology

Sheriguda (V), Ibrahimpatnam (M), R.R. Dist-501 510

Mid- I Examinations, NOV-2022

Set - I

Year & Branch: III-CSE (A, B, C)

Date:

Subject: SE

Marks: 10

Time: 60 min

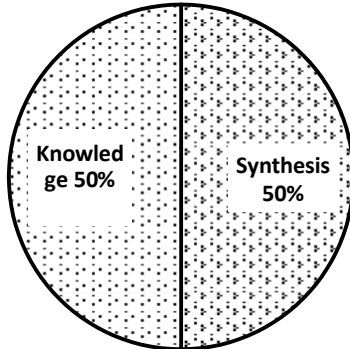
Answer any **TWO** Questions. All Question Carry Equal Marks

2*5=10 marks

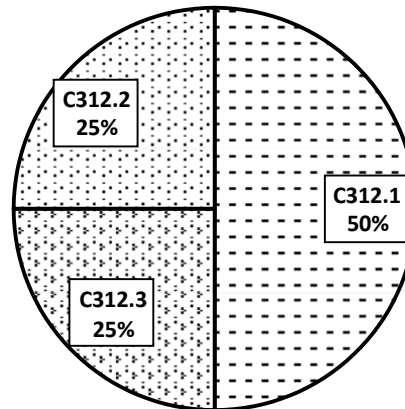
(This question paper is prepared with Course Outcome and BT's mapping)

1. Define software engineering and explain software myths?
Comprehension C312.1
2. What are the CMMI levels and Explain about it? Understand C312.1
3. Differentiate Between Verification and Validation? Comprehension C312.2
4. Explain about Waterfall model? Understand C312.3

QUESTION PAPER MAPPING WITH BT'S



QUESTION PAPER MAPPING WITH CO'S



Sri Indu Institute of Engineering & Technology

Sheriguda (V), Ibrahimpatnam (M), R.R.Dist-501 510

Mid Examinations, NOV-2022

Set - II

Year & Branch: III-CSE(A,B,C)

Date:

Subject: SE

Marks: 10

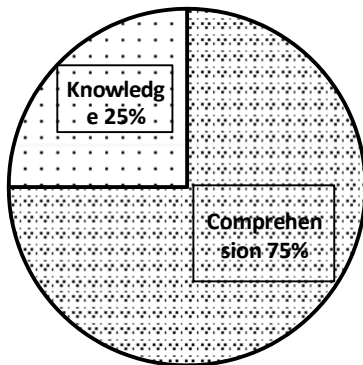
Time: 60 min

Answer any **TWO** Questions. All Question Carry Equal Marks 2*5=10 marks

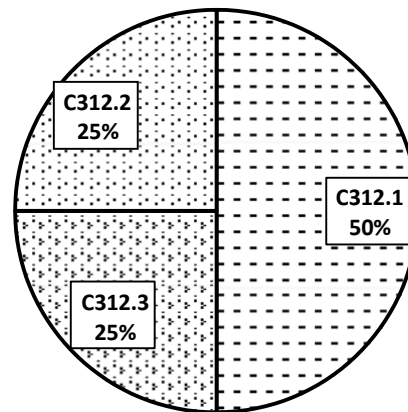
(This question paper is prepared with Course Outcome and BT's mapping)

1. Explain context model & object oriented model? Understand C312.1
2. Explain about Design process and Design quality and models? Understand C312.1
3. Explain about any four UML Diagrams? Understand C312.2
4. Explain about Design Architectural Styles? Understand C312.2

QUESTION PAPER MAPPING WITH BT'S



QUESTION PAPER MAPPING WITH CO'S



Sri Indu Institute of Engineering & Technology

Sheriguda (V), Ibrahimpatnam (M), R.R.Dist-501 510

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
B.TECH. IIIYEAR I SEM., I Mid Term Examinations, November – 2022

SOFTWARE ENGINEERING

OBJECTIVE EXAM

Name: _____ Hall Ticket No. _____

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Answer All Questions. All Questions Carry Equal Marks.

Time: 20 Min. Marks: 10.

I. Choose the Correct alternative:

- 1) The level at which the software uses scarce resources is _____ []
a) Reliability b) Efficiency c) Portability d) All of the above
- 2) Which is the way where the CMMI process Meta model can be represented? []
a) A continuous model b) A staged model c) Both A & B d) None of the above
- 3) The software becomes more popular if its user interface is _____ []
a) Attractive B) Simple to use C) Responsive in short time D) All mentioned above
- 4) Software consists of _____ []
a) Set of instructions + operating procedures b) Programs + documentation + operating procedures c) Programs + hardware manuals d) Set of programs
- 5) Which of the items listed below is not one of the software engineering layers? []
a) Process b) Manufacturing c) Methods d) Tools
- 6) Which of the following is/are considered stakeholder in the software process? []
a) Customers b) End-users c) Project managers d) All of the above
- 7) Which SDLC activity does the user initiates the request for a desired software product? []
a) Requirement gathering b) Implementation c) Disposition d) Communication
- 8) What is a measure of how well a computer system facilities learning? []
a) Usability b) Functionality c) Reliability d) None of the above
- 9) Abbreviate the term CMMI. []
a) Capability Maturity Model Integration b) Capability Model Maturity Integration
c) Capability Maturity Model Instructions d) Capability Model Maturity Instructions
- 10) First level of prototype is evaluated by _____. []
a) Developer b) Tester c) User d) System Analyst

II Fill in the Blanks

- 11 Who deliver the technical skills that are necessary to engineer for a product or an application _____
- 12 Which is focused towards the goal of the organization _____
- 13 Which model is also known as Verification and validation model _____
- 14 Which software enables the program to adequately manipulate information _____
- 15 If requirements are easily understandable and defined then which model is best suited _____
- 16 CASE Tool stands for _____
- 17 RAD Software process model stands for _____
- 18 Which of the following is not defined in a good Software Requirement Specification (SRS) document _____
- 19 SDLC stands for _____
- 20 Requirement engineering establishes a solid base for _____

Sri Indu Institute of Engineering & Technology
Sheriguda (V), Ibrahimpatnam (M), R.R.Dist-501 510
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
B.TECH. III YEAR I SEM I- Mid Term Examinations, Nov-2022
SOFTWARE ENGINEERING
OBJECTIVE KEY PAPER

1)b

2) C

3)d

4.)b

5)b

6)d

7)d

8)a

9)a

10)c

11) Practitioners

12) Feasibility study

13) V-model

14) Data Structures

15) Waterfall model

16) Computer Aided Software Engineering

17)Rapid Application Development.

18)Algorithm for software implementation.

19)Software Development Life Cycle

20)design and construction

Sri Indu Institute of Engineering & Technology

Sheriguda (V), Ibrahimpatnam (M), R.R.Dist-501 510

Mid-II Examinations, JAN-2023

Set - I

Year & Branch: III-CSE(A,B,C)

Date: JAN-2023

Subject: SE

Marks: 10

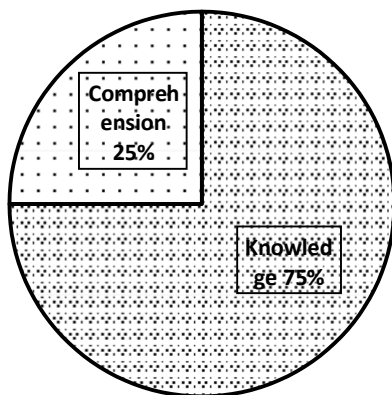
Time: 60 min

Answer any **TWO** Questions. All Question Carry Equal Marks 2*5=10 marks

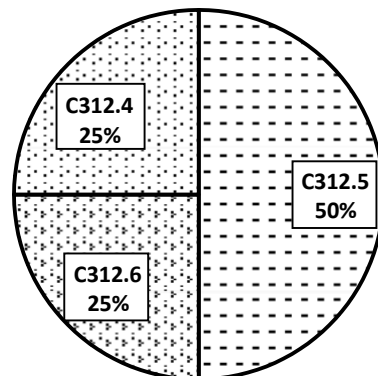
(This question paper is prepared with Course Outcome and BT's mapping)

1. What are the Design Principles of good software design & explain? (Knowledge) (5M)
2. What is testing? How it is different from debugging? (Analysis) (5M)
3. Discuss briefly about pro-active and re-active risk strategies in detail? (Application) (5M)
4. What is Change? How it can be in corporate in the software? (Analysis) (5M)

QUESTION PAPER MAPPING WITH BT'S



QUESTION PAPER MAPPING WITH CO'S



Sri Indu Institute of Engineering & Technology

Sheriguda (V), Ibrahimpatnam (M), R.R.Dist-501 510

Mid-II Examinations, JAN-2023

Set - II

Year & Branch: III-CSE(A,B,C)

Date: JAN-2023

Subject:SE

Marks: 10

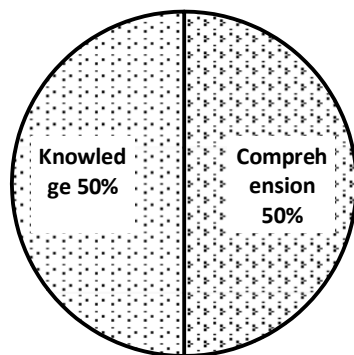
Time: 60 min

Answer any **TWO** Questions. All Question Carry Equal Marks 2*5=10 marks

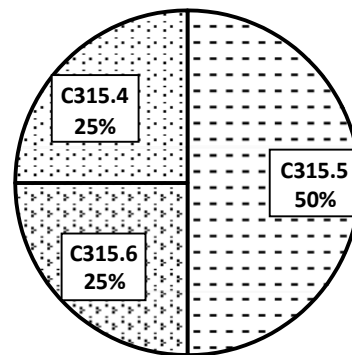
(This question paper is prepared with Course Outcome and BT's mapping)

1. Explain about software risk in detail & explain RMMM Plan? (Analysis) (5M)
2. What is software maintenance? How to control maintenance cost? (Synthesis) (5M)
3. Difference between black box testing & white box testing with diagrams? (Analysis) (5M)
4. Define Software list & explain about elements of a software process? (Knowledge) (5M)

QUESTION PAPER MAPPING WITH BT'S



QUESTION PAPER MAPPING WITH CO'S



Sri Indu Institute of Engineering & Technology

Sheriguda (V), Ibrahimpatnam (M), R.R.Dist-501 510

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

B.TECH. III YEAR I SEM., II Mid Term Examinations, January – 2023

SOFTWARE ENGINEERING

Objective Exam

Name: _____ Hall Ticket No. _____

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 1 .

I Choose the correct alternative:

1) Quality Management is known as _____ []

a) SQI b) SQA c) SQMd) SQA and SQM.

2 . Which is the most important feature of spiral model? []

a) Quality management b) Risk management c) Performance management d)Efficiency management

3) Organization can have in-house inspection, direct involvement of users and release of beta version are few of them and it also includes usability, compatibility, user acceptance etc. is called_____ []

a) Task analysis b) GUI requirement gathering c) GUI design & implementation d) Testing

4) Mention any two indirect measures of product. _____ []

a) Quality b) Efficiency c) Accuracy d) Both A and B

5) Which method is used for evaluating the expression that passes the function as an argument?
[]

a) Strict evaluation b) Recursion c) Calculus d) Pure functions

6. Which factors affect the probable consequences if a risk occur? []

a) Risk avoidance b) Risk monitoring c) Risk timing d) Contingency planning

7. ER model shows the _____? []

a) Static view b) Functional view c) Dynamic view d) All the above

8. One of the fault base testing techniques is_____. []

a) Unit Testing b) Beta Testing c) Stress Testing d) Mutation Testing

9. Staff turnover, poor communication with the customer are risks that are extrapolated from past experience are called_____ []

a) Business risks b) Predictable risks c) Project risks d) Technical risks

10. If P is risk probability, L is loss, then Risk Exposure (RE) is computed as__ ____ . []

a) $RE = P/L$ b) $RE = P + L$ c) $RE = P * L$ d) $RE = 2 * P * L$

II FILL IN THE BLANKS

11. Number of clauses used in ISO 9001 to specify quality system requirements are _____

12. Which plan describes how the skills and experience of the project team members will be developed -----

13. The model in which the requirements are implemented by its category is _____

14. A COCOMO model is_____ .

15. The tools that support different stages of software development life cycle are called_____ .

16. Organization can have in-house inspection, direct involvement of users and release of beta version are few of them and it also includes usability, compatibility, user acceptance etc. is called _____

17. Compilers, Editors software come under which type of software-----

18. RAD Software process model stands for _____

19. What is the simplest model of software development paradigm-----

20. Which design identifies the software as a system with many components interacting with each other-----

ANSWER KEY:

I Choose the correct Answers:

1. B
2. B
3. D
4. D
5. A
6. C
7. A
8. D
9. B
10. C

II Fill in the blanks Answers

11. 20
12. Staff Development Plan
13. Evolutionary Development Model
14. Constructive Cost Estimation Model
15. CASE Tools
16. Testing
17. System software
18. Rapid Application Development
19. Waterfall model
20. Architectural design

SriIndu Institute of Engineering & Technology

Sheriguda (V), Ibrahimpatnam (M), R.R.Dist-501 510

Mid-I Examinations, Nov-2022

Set - I

Year & Branch: III-CSE(A,B,C)

Subject: SE

Answer Key

Descriptive paper key link:

<https://drive.google.com/file/d/1FD6dhQTaHW4I6E2wVnHTEkRsRD8NMvBT/view?usp=sharing>

Mid-II Examinations, JAN-2023

Year & Branch: III-CSE(A,B,C)

Answer Key

Descriptive paper key link:

<https://docs.google.com/document/d/10kmlKp24Don-7qqS-vN6IPTe2QRZTEHU/edit?usp=sharing&oid=105411645617335509306&rtpof=true&sd=true>



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

Assignment Questions-I

(Assignment Questions are mapped with CO's, BT)

1. Define software engineering and explain software myths?
Comprehension C312.1
2. What are the CMMI levels and Explain about it? Understand C312.1
3. Differentiate Between Verification and Validation? Comprehension C312.24
4. Explain about Waterfall model? Understand C312.3
5. Explain about Design Architectural Styles? Understand C312.2



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

Assignment Questions-II

(Assignment Questions are mapped with CO's, BT)

1. What is testing? How it is different from debugging. (Knowledge)(C312.3)
2. Discuss briefly about proactive and re-active risk strategies. (Knowledge)(C312.4)
3. Explain about software risk in detail & explain RMMM plan? (Comprehension)(C312.4)
4. Difference between white box testing and black box testing? (Knowledge)(C312.5)
5. What is software maintainance? How to control maintaince cost? (Comprehension)(C312.6)



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

Result Analysis:

Course Title	SOFTWARE ENGINEERING
Course Code	CS502PC
Programme	B.Tech
Year & Semester	III year I-semester, B sec
Regulation	R18
Course Faculty	Ms.S.ANITHA, Assistant Professor , CSE

Slow learners:

S No	Roll no	No of backlogs	Internal-I Status	Internal-II Status
1	20X31A0575	6	21	22
2	20X31A0580	6	20	24
3	20X31A0582	6	20	23
4	20X31A0585	6	19	20
5	20X31A0591	5	20	21
6	20X31A0595	2	5	15
7	20X31A0599	4	22	22
8	20X31A05A1	2	21	21
9	20X31A05A2	6	17	17
10	20X31A05A6	6	21	21
11	20X31A05A9	4	23	21
12	21X31A0506	4	20	20



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

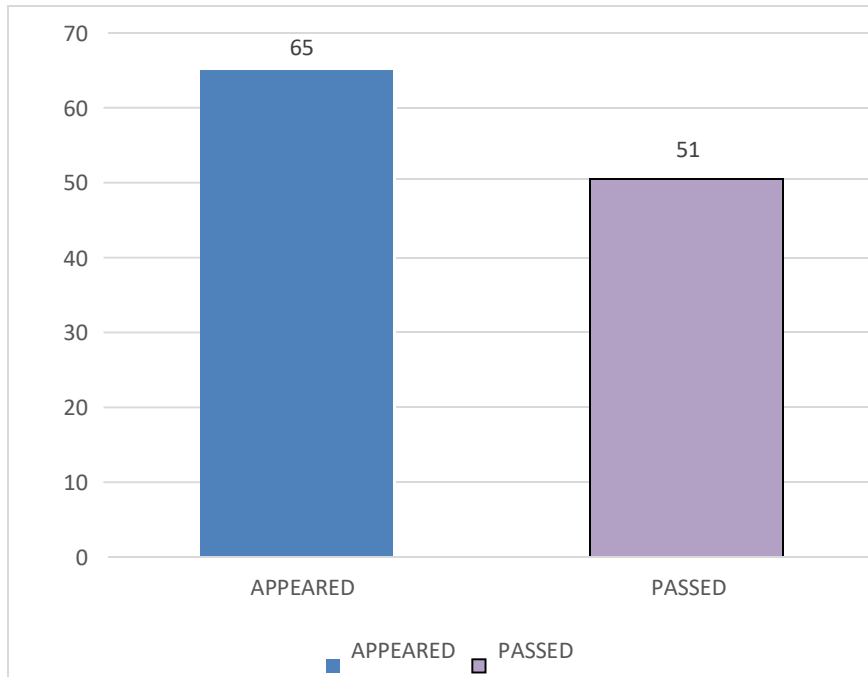
Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

BATCH CSE-IILBTECH I- SEM CSE – B RESULT ANALYSIS

ACADAMIC YEAR	COURSE NAME	NUMBER OF STUDENTS		QUESTION PAPER SETTING		PASS%
		APPEARED	PASSED	INTERNAL	EXTERNAL	
2022-23	SOFTWARE ENGINEERING	65	51	COURSE FACULTY	EXTERNAL	78.4%

SOFTWARE ENGINEERING (C312) Result Analysis





SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution under UGC)

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sherguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

REMEDIAL CLASSES TIME TABLE

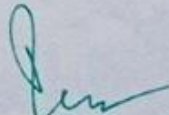
A.Y 2022-23

SEMESTER-I

BRANCH/ SEC	MON 4.00 PM- 5.00 PM	TUE 4.00 PM-5.00 PM	WED 4.00 PM- 5.00 PM	THUR 4.00 PM- 5.00 PM	FRI 4.00 PM- 5.00 PM
II CSE-A	A&DE	DS	C++	COA	COSM
II CSE-B	DS	A&DE	COSM	C++	COA
II CSE-C	COSM	COA	A&DE	DS	C++
III CSE-A	SE	FLAT	CN	WT	PPL
III CSE-B	WT	CN	SE	PPL	FLAT
III CSE-C	FLAT	WT	PPL	CN	SE
IV CSE-A	C&NS	DM	CC	POE	RTS
IV CSE-B	CC	RTS	C&NS	DM	POE
IV CSE-C	RTS	CC	POE	C&NS	DM


HOD

Computer Science & Engg. Dept.
SRI INDU INSTITUTE OF ENGG & TECH.
Sherguda(V), Ibrahimpatnam(M), R.R.Dist-501 510


PRINCIPAL
PRINCIPAL

Sri Indu Institute of Engineering & Tech.
Sherguda(Vill), Ibrahimpatnam
Ranga Reddy Dist. Telangana -501 510



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering

Course Outcome Attainment (Internal Examination-1)

Name of the faculty **S.Anitha**

Academic Year:

2022-23

Branch & Section: **CSE- B**

Examination:

I Internal

Course Name: **Software Engineering**

Year:

III

Semester: **I**

S.No	HT No.	Q1a	Q1b	Q1c	Q2a	Q2b	Q2C	Q3A	Q3b	Q3c	Q4a	Q4b	Q4c	Obj1	A1
Max. Marks ==>		5			5			5			5			10	5
1	20X31A0561	5									4			8	5
2	20X31A0562	2						5						9	5
3	20X31A0563				5						5			8	5
4	20X31A0564				5			5						8	5
5	20X31A0565							5			4			7	5
6	20X31A0566							5			4			8	5
7	20X31A0567				5						4			8	5
8	20X31A0568							5			5			8	5
9	20X31A0569							5			5			9	5
10	20X31A0570							4			5			9	5
11	20X31A0571				5						5			9	5
12	20X31A0572				5						4			8	5
13	20X31A0573	5									4			8	5
14	20X31A0574	4						5						9	5
15	20X31A0575							4			4			8	5
16	20X31A0576							4			4			7	5
17	20X31A0577							4			4			8	5
18	20X31A0578							4			4			9	5
19	20X31A0579							4			5			9	5
20	20X31A0580							5			2			7	5
21	20X31A0581				5			5						8	5
22	20X31A0582							3			4			8	5
23	20X31A0583							5			5			8	5
24	20X31A0584	5			4									8	5
25	20X31A0585							2			4			8	5
26	20X31A0586							5			4			8	5
27	20X31A0587	4			4									8	5
28	20X31A0588	4									5			8	5
29	20X31A0589				5			5						8	5
30	20X31A0590	4									4			AB	5
31	20X31A0591	4			3									8	5
32	20X31A0592				5			5						8	5
33	20X31A0593							5			5			8	5
34	20X31A0594							4			3			8	5
35	20X31A0595							5			5			8	5
36	20X31A0596	5									4			9	5
37	20X31A0597	5									5			9	5
38	20X31A0598							4			5			8	5
39	20X31A0599							5			4			8	5

40	20X31A05A0							5			4			9	5
41	20X31A05A1							4			4			8	5
42	20X31A05A2							3			2			7	5
43	20X31A05A3							4			5			8	5
44	20X31A05A4							4			5			8	5
45	20X31A05A5							5			5			8	5
46	20X31A05A6	3												8	5
47	20X31A05A7				4						5			7	5
48	20X31A05A8	4									4			7	5
49	20X31A05A9							5			4			8	5
50	20X31A05B0							5			4			7	5
51	20X31A05B1							5			5			8	5
52	20X31A05B2	5			5									9	5
53	20X31A05B3							5			5			8	5
54	20X31A05B4				5						5			8	5
55	20X31A05B5							5			4			7	5
56	20X31A05B6							4			4			7	5
57	20X31A05B7							4			5			9	5
58	20X31A05B8							5			5			9	5
59	20X31A05B9							5			4			8	5
60	20X31A05C0							4			4			8	5
61	21X35A0506	4						4						7	5
62	21X35A0507							4			4			8	5
63	21X35A0508				4						5			8	5
64	21X35A0509	4									4			7	5
65	21X35A0510	5						4						8	5
66															
67															
68															
69															
70															
71															
72															
73															
Target set by the faculty / HoD		2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	4.00	2.00
Number of students performed above		15	0	0	0	0	0	42	0	0	60	0	0	63	63
Number of students attempted		15	0	0	0	0	0	47	0	0	60	0	0	63	63
Percentage of students scored more than target		100%						89%			100%			100%	100%

CO Mapping with Exam Questions:

CO - 1	Y			Y	Y									y	y
CO - 2								Y	Y					y	y

CO - 3										Y			y	y
CO - 4														
CO - 5														
CO - 6														

CO Attainment based on Exam Questions:

CO - 1	100%												100%	100%
CO - 2							89%						100%	100%
CO - 3										100%			100%	100%
CO - 4														
CO - 5														
CO - 6														

CO	Subj	obj	Asgn	Overall	Level
CO-1	100%	100%	100%	100%	3.00
CO-2	89%	100%	100%	96%	3.00
CO-3	100%	100%	100%	100%	3.00
CO-4					
CO-5					
CO-6					

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal 1 Examination) = **3.00**

44	20X31A05A4	5			5									8	5
45	20X31A05A5	5			4									8	5
46	20X31A05A6	4						3						8	5
47	20X31A05A7	5			4									7	5
48	20X31A05A8				4			4						8	5
49	20X31A05A9	4			5									7	5
50	20X31A05B0	4			5									8	5
51	20X31A05B1	5			5									9	5
52	20X31A05B2	5			5									8	5
53	20X31A05B3				5			5						8	5
54	20X31A05B4	5						4						7	5
55	20X31A05B5	4						3						8	5
56	20X31A05B6	4			4									7	5
57	20X31A05B7	5						4						9	5
58	20X31A05B8				4			4						7	5
59	20X31A05B9				5			4						8	5
60	20X31A05C0				4			4						9	5
61	21X35A0506	4			4									9	5
62	21X35A0507	4			4									7	5
63	21X35A0508				4			4						8	5
64	21X35A0509	4			4									7	5
65	21X35A0510				5			4						8	5
66															
67															
68															
69															
70															
71															
72															
73															
Target set by the faculty / HoD		2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	4.00	2.00
Number of students performed above the target		21	0	0	5	0	0	41	0	0	51	0	0	63	63
Number of students attempted		22	0	0	5	0	0	41	0	0	51	0	0	63	63
Percentage of students scored more than target		95%			100%			100%			100%			100%	100%

CO Mapping with Exam Questions:

CO - 1															
CO - 2															
CO - 3															
CO - 4	Y													y	y
CO - 5				Y										y	y
CO - 6								Y			Y			y	y

% Students Scored >Target %	95%			100%			100%			100%			100%	100%
--------------------------------	-----	--	--	------	--	--	------	--	--	------	--	--	------	------

CO Attainment based on Exam Questions:

CO - 1														
CO - 2														
CO - 3														
CO - 4	95%												100%	100%
CO - 5				100%									100%	100%
CO - 6							100%			100%			100%	100%

CO	Subj	obj		Asgn	Overall	Level
CO-1						
CO-2						
CO-3						
CO-4	95%	100%		100%	98%	3
CO-5	100%	100%		100%	100%	3
CO-6	100%	100%		100%	100%	3

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal Examination-2) = **3.00**



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering

Course Outcome Attainment (University Examinations)

Name of the faculty : S.ANITHA

Academic Year:

2022-23

Branch & Section: CSE- B

Year / Semester:

III/I

Course Name: **Software Engineering**

S.No	Roll Number	Marks Secured
1	20X31A0561	26
2	20X31A0562	26
3	20X31A0563	34
4	20X31A0564	39
5	20X31A0565	27
6	20X31A0566	29
7	20X31A0567	32
8	20X31A0568	28
9	20X31A0569	26
10	20X31A0570	35
11	20X31A0571	34
12	20X31A0572	27
13	20X31A0573	38
14	20X31A0574	26
15	20X31A0575	14
16	20X31A0576	16
17	20X31A0577	39
18	20X31A0578	37
19	20X31A0579	26
20	20X31A0580	5
21	20X31A0581	26
22	20X31A0582	1
23	20X31A0583	45
24	20X31A0584	27
25	20X31A0585	7
26	20X31A0586	27
27	20X31A0587	14
28	20X31A0588	35
29	20X31A0589	26
30	20X31A0590	41
31	20X31A0591	15
32	20X31A0592	33
33	20X31A0593	46
34	20X31A0594	26
35	20X31A0595	17

S.No	Roll Number	Marks Secured
36	20X31A0596	34
37	20X31A0597	36
38	20X31A0598	31
39	20X31A0599	18
40	20X31A05A0	29
41	20X31A05A1	16
42	20X31A05A2	3
43	20X31A05A3	31
44	20X31A05A4	39
45	20X31A05A5	30
46	20X31A05A6	6
47	20X31A05A7	26
48	20X31A05A8	27
49	20X31A05A9	14
50	20X31A05B0	42
51	20X31A05B1	43
52	20X31A05B2	44
53	20X31A05B3	27
54	20X31A05B4	39
55	20X31A05B5	40
56	20X31A05B6	31
57	20X31A05B7	26
58	20X31A05B8	45
59	20X31A05B9	27
60	20X31A05C0	35
61	21X35A0506	13
62	21X35A0507	26
63	21X35A0508	41
64	21X35A0509	26
65	21X35A0510	30
66		
67		
68		
69		
70		

Max Marks	75
Class Average mark	21
Number of students performed above the target	37
Number of successful students	63

Attainment Level	% students
1	40%
2	50%

Percentage of students scored more than target	59%
Attainment level	2

3	60%
---	-----



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering

Course Outcome Attainment

Name of the faculty :S.Anitha

Academic Year 2022-23

Branch & Section: CSE- B

Examination: I Internal

Course Name:

Year: III

**Software
Engineering**

Semester: I

Course Outcomes	1st Internal Exam	2nd Internal Exam	Internal Exam	University Exam	Attainment Level
CO1	3.00		3.00	2.00	2.25
CO2	3.00		3.00	2.00	2.25
CO3	3.00		3.00	2.00	2.25
CO4		3.00	3.00	2.00	2.25
CO5		3.00	3.00	2.00	2.25
CO6		3.00	3.00	2.00	2.25
Internal & University Attainment:			3.00	2.00	
Weightage			25%	75%	
CO Attainment for the course (Internal, University)			0.75	1.50	
CO Attainment for the course (Direct Method)			2.25		

Overall course attainment level

2.25



SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Computer Science and Engineering

Program Outcome Attainment (from Course)

Name of Faculty: S.ANITHA Academic Year: 2022-23

Branch & Section: CSE- B Year: III

Course Name: **SoftwareEngineering**

Semester: I

CO-PO mapping

PO/PSO/ CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C312.1	3	-	-	-	-	-	-	-	-	-	-	3	1	-
C312.2	3	2	-	-	-	-	-	-	-	-	-	3	-	-
C312.3	3	-	2	-	-	-	-	-	-	-	-	3	-	-
C312.4	3	-	-	-	1	-	-	-	-	-	-	3	1	-
C312.5	2	-	-	-	1	-	-	-	-	-	-	3	2	2
C312.6	3	2	-	-	-	-	-	-	-	-	-	3	1	-
C313	2.8	2	1.7	-	2	-	-	-	-	-	-	2.8	-	-

CO	Course Outcome Attainment
CO1	2.25
CO2	2.25
CO3	2.25
CO4	2.25
CO5	2.25
CO6	2.25
Overall course attainment level	2.25

PO-ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	2.10	1.20	1.95	1.50								1.50

CO contribution to PO - 33%, 67%, 100% (Level 1/2/3)



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Accredited by NAAC with A+ Grade, Recognized under 2(f) of UGC Act 1956

(Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

ASSIGNMENTS & ATTENDANCE REGISTER LINK

Assignment-1 Script link:

<https://drive.google.com/file/d/11mPPWmO9SVbipnvxEmuOaFtBd404oTaT/view?usp=drivesdk>

Assignment-2 Script link:

https://drive.google.com/file/d/11j5JPMOqUuA_m180L0V0rMTTH5JhFVDy/view?usp=drivesdk

ATTENDANCE REGISTER LINK:

<https://drive.google.com/file/d/13ietoEG59S71dqfwPJsWiMMbEBW8Qtiw/view?usp=drivesdk>