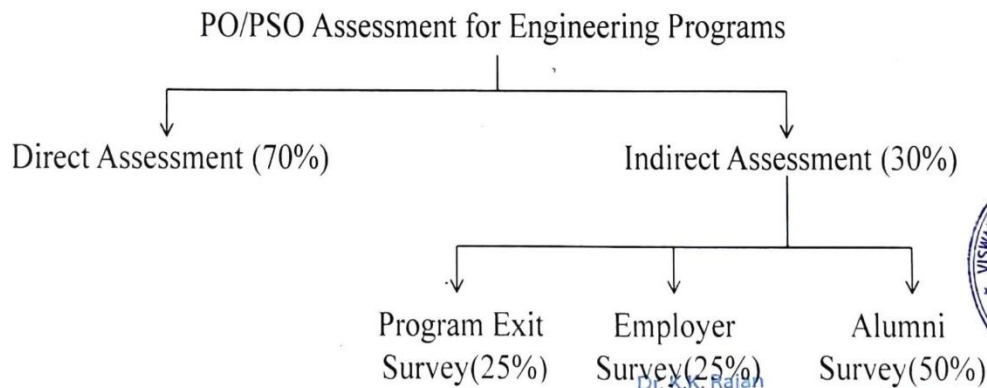
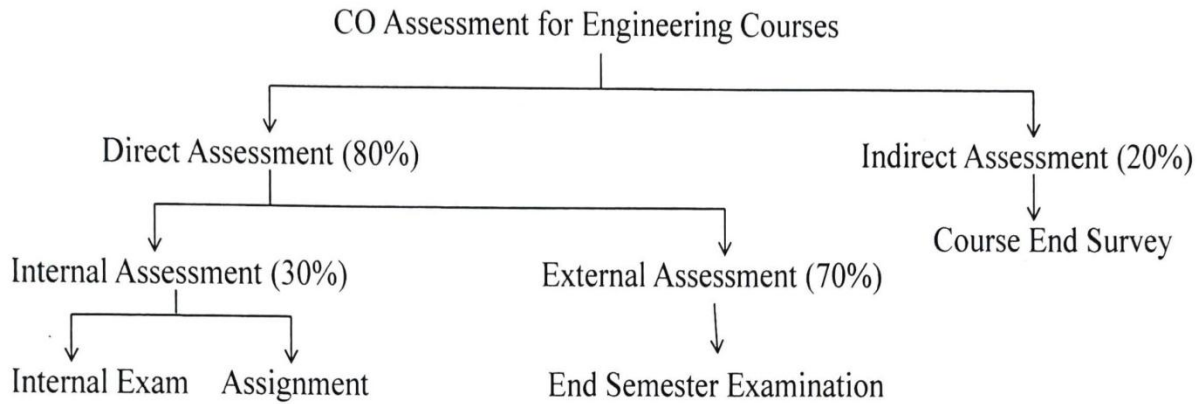




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Dr. K.K. Rajan
Principal
Viswajyothi College of Engineering & Technology
Vazhakulam P.O., Muvattupuzha, Kerala-686 670



Rajan



VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

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Established in 2001
Managed by Catholic Diocese Kothamangalam



VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,
VAZHAKULAM P.O, MUVATTUPUZHA, ERNAKULAM - 686670

COURSE DATA SHEET

PROGRAMME: COMPUTER SCIENCE & ENGINEERING	DEGREE: B TECH
COURSE: SYSTEM SOFTWARE	SEMESTER: V CREDITS: 3
COURSE CODE: C302	COURSE TYPE: CORE
COURSE AREA/STREAM: SYSTEM SOFTWARE AND COMPUTATIONAL METHODOLOGY	CONTACT HOURS: 3+1 (Tutorial) hours/Week.
CORRESPONDING LAB COURSE CODE (IF ANY): C308	LAB COURSE NAME: SYSTEM SOFTWARE LAB
COURSE COORDINATOR NAME : DONA JOSE	

SYLLABUS:

MODULE	DETAILS	HOURS
I	System Software Vs. Application Software, Different System Software– Assembler, Linker, Loader, Macro Processor, Text Editor, Debugger, Device Driver, Compiler, Interpreter, Operating System(Basic Concepts only) SIC & SIC/XE Architecture, Addressing modes, SIC & SIC/XE Instruction set, Assembler Directives and Programming.	8
II	Assemblers Basic Functions of Assembler, Assembler output format – Header, Text and End Records- Assembler data structures, Two pass assembler algorithm, Hand assembly of SIC/XE program, Machine dependent assembler features	6
III	Assembler design options: Machine Independent assembler features – program blocks, Control sections, Assembler design options Algorithm for Single Pass assembler, Multi pass assembler, Implementation example of MASM Assembler	7
IV	Linker and Loader Basic Loader functions - Design of absolute loader, Simple bootstrap Loader, Machine dependent loader features- Relocation, Program Linking, Algorithm and data structures of two pass Linking Loader, Machine dependent loader features, Loader Design Options.	7
V	Macro Preprocessor:- Macro Instruction Definition and Expansion, One pass Macro processor Algorithm and data structures, Machine Independent Macro Processor Features, Macro processor design options	7
VI	Device drivers: Anatomy of a device driver, Character and block device drivers, General design of device drivers Text Editors: Overview of Editing, User Interface, Editor Structure, Debuggers :- Debugging Functions and Capabilities, Relationship with other parts of the system, Debugging Methods- By Induction, Deduction and Backtracking.	8
TOTAL HOURS		43

TEXT/REFERENCE BOOKS:

T/R	BOOK TITLE/AUTHORS/PUBLICATION
1	Leland L. Beck, System Software: An Introduction to Systems Programming, 3/E. Pearson Education Asia.
2	D.M. Dhamdhare, Systems Programming and Operating Systems, Second Revised Edition, Tata McGraw Hill.



3	John J. Donovan, Systems Programming, Tata McGraw Hill Edition 1991.
4	Writing UNIX device drivers - George Pajari – Addison Wesley Publications (Ebook : http://toCS.ulb.tu-darmstadt.de/197262074.pdf).
5	Peter Abel, IBM PC Assembly Language and Programming, Third Edition, Prentice Hall of India.
6	Jonathan Corbet, Alessandro Rubini, Greg Kroah-Hartman, Linux Device Drivers, Third Edition, O.Reilly Books
7	M. Beck, H. Bohme, M. Dziadzka, et al., Linux Kernel Internals, Second Edition, Addison Wesley Publications,
8	J Nithyashri, System Software, Second Edition, Tata McGraw Hill.
9	http://gcc.gnu.org/onlinedocs/gcc-2.95.3/cpp_1.html - The C Preprocessor

COURSE PRE-REQUISITES:

C.CODE	COURSE NAME	DESCRIPTION	SEM
C303	Microprocessor and Microcontrollers	Assembly language concepts	V

COURSE OBJECTIVES:

1	To make students understand the design concepts of various system software like Assembler, Linker, Loader and Macro pre-processor. Utility Programs such as Text Editor and Debugger.
---	---

COURSE OUTCOMES:

SNO	DESCRIPTION
C302.1	Distinguish different software into different categories..
C302.2	Design, analyze and implement one pass, two pass or multi pass assembler
C302.3	Design, analyze and implement loader and linker.
C302.4	Design, analyze and implement macro processors.
C302.5	Critique the features of modern editing /debugging tools.

CORELATION BETWEEN COURSE OUTCOMES AND PROGRAMME OUTCOMES

SNO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C302.1	3	1	1	1	-	-	-	-	-	-	-	-
C302.2	3	2	2	1	1	-	-	-	-	-	-	2
C302.3	3	2	2	1	1	-	-	-	-	-	-	2
C302.4	3	2	2	-	1	-	-	-	-	-	-	1
C302.5	3	2	2	2	-	-	-	-	-	-	-	2
C302	3	1.8	1.8	1.25	1	-	-	-	-	-	-	1.75



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JUSTIFICATION FOR CORELATION

COs	RELATED POs	JUSTIFICATION
C302.1	PO1 PO2 PO3 PO4	PO1: System Software should be concerned with the application of computers, computing, and software to practical purposes, specifically the design, construction, and operation of efficient and economical computing system. PO2: It helps to analyze complex engineering problems and to identify the purpose of different system softwares. PO4 : use the concepts and differences of various system softwares in order to understand the working of softwares. PO12 : acquired the knowledge about different system softwares for their future use.
C302.2	PO1 PO2 PO3 PO4 PO5 PO12	PO1: It helps to understand macro processors and is able to apply this knowledge in various engineering applications. PO2: able to analyze complex programs using principle of engineering science. PO3: Design of Macro processor allows the programmer to write shorthand version of a program so it can reduce the complexity of large problems. PO4: Use the knowledge of macro processors and its designing steps to generate and implement macros in programming languages. PO5: a c- preprocessor is a text substitution tool that is used to do required pre-processing before actual compilation so it will increase the speed of execution and reduce the complexity of the problem. PO12 : The basic functions and working of a macro processor helps for the use of latest macroprocessors in future.
C302.3	PO1 PO2 PO3 PO4 PO5 PO12	PO1: It helps to understand assembly language concepts and basic function of an assembler. PO2: Study of Assemblers will help us to know the translator programs supplied by the manufacturer. PO3: able to design single pass or two pass assembler to solve engineering problems. PO4 : Use the knowledge of comparison among single pass and two pass to design an assembler. PO5: The Microsoft Macro Assembler is a tool that consumes x86 assembly language programs and generates corresponding binaries. PO12 : familiarization of assembly languages and working of assemblers helps to develop applications based on microprocessor systems
C302.4	PO1 PO2 PO3 PO5 PO12	PO1: loaders and linkers are the softwares used for handling object files and executable files for a program. It will increase the efficiency and modularity of complex problems. PO2: help to analyze the two passes of a linking loader, this will increase the efficiency of system software. PO3: acquiring knowledge regarding the passes of loader and linkage editor for designing the different phases.



		PO5: able to apply the tool UNIX ELF and Microsoft DLL to reduce the complexity of the design of system software. PO12: memory management and loading schemes is a continuous learning for the execution of any applications
C302.5	PO1 PO2 PO3 PO4 PO12	PO1: Knowledge about text editors and debuggers will help to reduce the complexity of complex engineering problems. PO2: To know about the primary interface and the observation and flow of control of program execution will help to analyze and reduce the complexity of problems. PO3: Design of VI editor helps to analyze and improve the efficiency of text editing. PO4: use the knowledge of different debugging methods to test a programming language in order to obtain valid solutions. PO8: Apply the ethical principles of different debugging methods. PO12: knowledge about editing and debugging is required for testing applications as a QA analysts.

CORELATION BETWEEN COURSE OUTCOMES AND PROGRAMME SPECIFIC OUTCOMES

SNO	PSO 1	PSO 2	PSO 3
C302.1	2	2	2
C302.2	3	2	-
C302.3	3	1	-
C302.4	1	2	-
C302.5	2	2	1
C302	2.2	1.8	1.5

JUSTIFICATION FOR CORELATION

SNO	RELATED PSOs	JUSTIFICATION
C302.1	PSO1 PSO2 PSO3	PSO1: Theoretical and practical knowledge of different system softwares are essential for human beings to interact with computers. PSO2: apply the knowledge of various system softwares to learn the complete implementation of a system. PSO3: able to design different system softwares for minor-projects.
C302.2	PSO1 PSO2 PSO3	PSO1: Macro allows the programmer to write shorthand version of a program. PSO2: Macro Preprocessor design and algorithm will help to reduce the complexity of large programs. PSO3: Able to design a macro processor by learning the concepts and functions of macro.
C302.3	PSO1 PSO2	PSO1: Depends upon the Machine architecture the programmer can design an Assembler PSO2: Able to understand the working of assembler in order to implement assembly language programs.



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C302.4	PSO1	PSO1: Linker and Loader are needed for executing engineering problems PSO2: To know the algorithm for two passes of a linking loader, this will increase the efficiency of system software
	PSO2	
C302.5	PSO1	PSO1: An interactive text editing and Debugging system provides programmers with facilities that aids in editing, testing and debugging of programs. PSO2: The primary interface and the flow of control of program execution will help to analyze and reduce the complexity of problems. PSO3: Features and knowledge of different debugging methods can be used for better performance in testing projects.
	PSO2	
	PSO3	

WEB SOURCE REFERENCES:

1	http://nptel.iitm.ac.in
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DELIVERY/INSTRUCTIONAL METHODOLOGIES:

CHALK & TALK	STUD. ASSIGNMENT	WEB RESOURCES	TUTORIAL
LCD/SMART BOARDS			

DELIVERY METHODS USED FOR EACH COURSE OUT COME

COs	DELIVERY METHODS
C302.1	Chalk & Talk, Tutorial, LCD, Web resources
C302.2	Chalk & Talk, Students assignments, Tutorial, LCD, Web resources
C302.3	Chalk & Talk, Tutorial, LCD, Web resources
C302.4	Chalk & Talk, Tutorial, LCD, Web resources
C302.5	Chalk & Talk, Students assignments, Tutorial, LCD, Web resources

ASSESSMENT METHODOLOGIES-DIRECT

ASSIGNMENTS	TESTS/MODEL EXAMS	UNIV. EXAMINATION
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ASSESSMENT METHODOLOGIES-INDIRECT

STUDENT FEEDBACK ON FACULTY (TWICE)

ASSESSMENT METHODOLOGIES USED FOR EACH COURSE OUT COME

SNO	ASSESSMENT METHODOLOGIES-DIRECT	ASSESSMENT METHODOLOGIES-INDIRECT
C302.1	Tests, Assignments, Univ. Exam	Student feed back on faculty
C302.2	Tests, Univ. Exam	Student feed back on faculty
C302.3	Tests, Univ. Exam	Student feed back on faculty
C302.4	Tests, Univ. Exam	Student feed back on faculty
C302.5	Tests, Assignments, Univ. Exam	Student feed back on faculty

Prepared by
(Course Coordinator)


Dona Jose
Name and Signature



Approved by
(Program Coordinator)


Mr. Amel Austine
Name and Signature

HEAD, COMPUTER SCIENCE & ENGG DEPT.
Viswajyothi College Of Engg. & Tech.
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VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,
VAZHAKULAM P.O, MUVATTUPUZHA, ERNAKULAM - 686670

COURSE DATA SHEET

PROGRAMME: COMPUTER SCIENCE AND ENGINEERING	DEGREE: B TECH
COURSE: SYSTEMS SOFTWARE LAB	SEMESTER: 5 CREDITS: 1
COURSE CODE: C308	COURSE TYPE: CORE
COURSE AREA/STREAM: SYSTEM SOFTWARE AND COMPUTATIONAL METHODOLOGY	CONTACT HOURS: 3 hours/Week.
CORRESPONDING LAB COURSE CODE (IF ANY): NA	LAB COURSE NAME: NA
COURSE COORDINATOR NAME : DONA JOSE	

SYLLABUS:

Exp. No	Experiment Name	Hours
I	Simulate the following non-preemptive CPU scheduling algorithms to find turnaround time and waiting time. a) FCFS b) SJF c) Round Robin (pre-emptive) d) Priority	6
II	Simulate the following file organization techniques * a) Single level directory b) Two level directory c) Hierarchical	3
III	Implement the banker's algorithm for deadlock avoidance.	3
IV	Simulate the following disk scheduling algorithms. * a) FCFS b)SCAN c) C-SCAN	6
V	Simulate the following page replacement algorithms a) FIFO b)LRU	3
VI	Implement the producer-consumer problem using semaphores. *	1.5
VII	Write a program to simulate the working of the dining philosopher's problem	1.5
VIII	Implement pass one of a two pass assembler.	6
IX	Implement pass two of a two pass assembler	3
X	Implement a single pass assembler.	3
XI	Implement a two pass macro processor	3
XII	Implement a symbol table with suitable hashing	3



TEXT/REFERENCE BOOKS:

T/R	BOOK TITLE/AUTHORS/PUBLICATION
1	Abraham Silberschatz, Peter B. Galvin and Greg Gagne, "Operating System Concepts", John Wiley & Sons Inc, 8th Edition 2010.
2	Leland L. Beck, System Software: An Introduction to Systems Programming, 3/E., Pearson Education Asia.

COURSE PRE-REQUISITES:

C.CODE	COURSE NAME	DESCRIPTION	SEM
C128	Computer Programming Lab	A fair knowledge on how to use UNIX, terminal, text editors	II
C302	System Software	Good knowledge on various system softwares	V
C211	Operating Systems	A good knowledge on Operating system concepts. file structures, process management	IV

COURSE OBJECTIVES:

1	To build an understanding on design and implementation of different types of system software.
---	---

COURSE OUTCOMES:

CO	DESCRIPTION
C308.1	Student is able to compare and analyze CPU Scheduling algorithms like FCFS, Round Robin, SJF and Priority
C308.2	Students will be able to implement basic memory management schemes
C308.3	Students will be able to implement Synchronization techniques using semaphores
C308.4	Students will be able to implement Banker's algorithm for Deadlock Avoidance
C308.5	Students will be able to implement Page replacement schemes, File Allocation and Organization techniques
C308.6	Students will be able to implement system software such as loaders, assemblers and macro processor.

CORELATION BETWEEN COURSE OUTCOMES AND PROGRAMME OUTCOMES

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C308.1	3	-	-	2	2	-	-	-	-	-	-	1
C308.2	2	2	2	2	1	-	-	-	-	-	-	2
C308.3	2	2	2	2	2	-	-	-	-	-	-	1
C308.4	2	3	3	3	-	-	-	-	-	-	-	2
C308.5	2	2	3	1	1	-	-	-	-	-	-	1
C308.6	2	-	2	2	1	-	-	-	-	-	-	1
C308	2.16	2.25	2.4	2	1.4	-	-	-	-	-	-	1.33



JUSTIFICATION FOR CORELATION

COs	RELATED POs	JUSTIFICATION
C308.1	PO1, PO4, PO5, PO12	PO1: Programs on CPU scheduling explains how it act as the solution of complex engineering problems. PO4: The experiment explains about the solutions for complex engineering problems with CPU scheduling. PO5: Explain how to apply appropriate techniques for modelling to complex engineering activities with an understanding of the limitations. PO12: It helps to recognize the need for advanced learning in designing good CPU scheduling.
C308.2	PO1, PO2, PO3, PO4, PO5, PO12	PO1: Programs on memory management explain how it act as the solution of complex engineering problems. PO2: The experiment explains complex engineering problems related to memory management using principles engineering sciences. PO3: The experiment explains about the design of processes with memory allocation techniques. PO4: The experiment explains about design of processes with optimal memory allocation schemes. PO5: Explain how to model to complex processes and their execution. PO12: It helps to recognize the need for advanced learning in designing optimal memory allocation schemes.
C308.3	PO1, PO2, PO3, PO4, PO5, PO12	PO1: Programs on semaphores explain how it acts as the solution of synchronisation problem. PO2: The experiment explains complex engineering problems of resource sharing using mutual exclusion. PO3: The experiment explains about the solutions for processes that meet specific needs. PO4: Programs on synchronisation uses research based knowledge. PO5: Explain how to apply appropriate techniques and modelling the execution of processes. PO12: It helps to recognize the need for advanced learning in designing mutually exclusive processes.
C308.4	PO1, PO2, PO3, PO4, PO12	PO1: Banker's algorithm program explains how it acts as the solution of complex engineering problems. PO2: The experiment analyses the execution pattern of complex problems. PO3: Program creates solutions for deadlock avoidance of a group of processes. PO4: The experiment explains about the analysis of safe execution sequence of a set of processes. PO12: It helps to recognize the need for advanced learning in designing a deadlock free environment.
C308.5	PO1, PO2, PO3, PO4, PO5, PO12	PO1: Programs on page replacement explains how it acts as the solution of optimal execution of processes. PO2: The experiment explains complex engineering problems on page replacement. PO3: The experiment explains about the solutions for processes that meet specific needs. PO4: Programs on synchronisation uses research based knowledge. PO5: Explain how to apply appropriate techniques in minimising page faults. PO12: It helps to recognize the need for advanced learning in designing optimal page replacement algorithms.
C308.6	PO1, PO3, PO4, PO5, PO12	PO1: Programs on implementation of system software uses basic engineering knowledge. PO3: The experiment explains about the design of system components. PO4: Programs on system software uses research based knowledge. PO5: Explain how to apply appropriate techniques and modelling the execution of processes. PO12: It helps to recognize the need for advanced learning in loaders, assemblers etc



CORELATION BETWEEN COURSE OUTCOMES AND PROGRAMME SPECIFIC OUTCOMES

CO	PSO1	PSO2	PSO3
C308.1	3	2	-
C308.2	2	3	1
C308.3	2	3	2
C308.4	3	3	1
C308.5	2	3	2
C308.6	3	2	2
C308	2.5	2.66	1.6

JUSTIFICATION FOR CORELATION

COs	RELATED PSOs	JUSTIFICATION
C308.1	PSO1, PSO2	PSO1: Programs on CPU scheduling explain how it acts as the solution of constructing software systems of varying complexity. PSO2: The experiment explains the mathematical techniques to analyse the execution of processes.
C308.2	PSO1, PSO2, PSO3	PSO1: Programs on basic memory management schemes explain how it act as the solution of constructing software systems of varying complexity PSO2: The experiment explains the mathematical techniques to analyse the memory allocation of processes. PSO 3: Experiment helps in designing small scale projects.
C308.3	PSO1, PSO2, PSO3	PSO1: Programs on synchronisation using semaphores explain how it act as the solution of complex engineering problems. PSO2: The experiment explains the mathematical techniques to analyse the execution of processes that share some resources. PSO 3: Experiment helps in designing small scale projects.
C308.4	PSO1, PSO2, PSO3	PSO1: Banker's algorithm explains how it acts as the solution of constructing deadlock free environment. PSO2: The experiment explains the mathematical techniques to analyses execution sequence of processes. PSO 3: Experiment helps in designing small scale projects.
C308.5	PSO1, PSO2, PSO3	PSO1: Programs on page replacement explains how it acts as the solution of complex engineering problems. PSO2: The experiment explains the mathematical techniques to analyse optimal page replacement algorithms. . PSO 3: Experiment helps in designing small scale projects.
C308.6	PSO1, PSO2, PSO3	PSO1: Programs on implementation of system software explain how it acts as the solution of complex engineering problems. PSO2: The experiment explains the mathematical techniques to design and analyse system components. PSO 3: Experiment helps in designing small scale projects.



WEB SOURCE REFERENCES:

1	www.geeksforgeeks.org/gate-notes-operating-system-process-scheduling/
2	www.tutorialspoint.com/operating_system/os_memory_management.htm
3	https://en.wikipedia.org/wiki/Banker%27s_algorithm

DELIVERY/INSTRUCTIONAL METHODOLOGIES:

CHALK & TALK	WEB RESOURCES	LCD/SMART BOARDS
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DELIVERY METHODS USED FOR EACH COURSE OUT COME

SNO	DESCRIPTION
C308.1	CHALK & TALK, LCD/SMART BOARDS
C308.2	CHALK & TALK, LCD/SMART BOARDS
C 308.3	CHALK & TALK
C308.4	CHALK & TALK, WEB RESOURCES
C308.5	CHALK & TALK
C 308.6	CHALK & TALK

ASSESSMENT METHODOLOGIES-DIRECT

TESTS/MODEL EXAMS	STUD. LAB PRACTICES	STUD. VIVA
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ASSESSMENT METHODOLOGIES-INDIRECT

STUDENT FEEDBACK ON FACULTY (ONCE)

ASSESSMENT METHODOLOGIES USED FOR EACH COURSE OUT COME

SNO	ASSESSMENT METHODOLOGIES-DIRECT	ASSESSMENT METHODOLOGIES-INDIRECT
C308.1	TESTS/MODEL EXAMS STUD. LAB PRACTICES STUD. VIVA	STUDENT FEEDBACK ON FACULTY (ONCE)
C308.2	TESTS/MODEL EXAMS STUD. LAB PRACTICES STUD. VIVA	STUDENT FEEDBACK ON FACULTY (ONCE)
C308.3	TESTS/MODEL EXAMS STUD. LAB PRACTICES STUD. VIVA	STUDENT FEEDBACK ON FACULTY (ONCE)
C308.4	TESTS/MODEL EXAMS STUD. LAB PRACTICES STUD. VIVA	STUDENT FEEDBACK ON FACULTY (ONCE)



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C308.5	TESTS/MODEL EXAMS STUD. LAB PRACTICES STUD. VIVA	STUDENT FEEDBACK ON FACULTY (ONCE)
C308.6	TESTS/MODEL EXAMS STUD. LAB PRACTICES STUD. VIVA	STUDENT FEEDBACK ON FACULTY (ONCE)

Prepared by
(Course Coordinator)

Dona Jose
Name and Signature

Approved by
(Program Coordinator)

Mr. Amel Austine
Name and Signature



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Course Outcome Attainment Sheet - THEORY

VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM

Branch	Civil Engg./Elec. & Comm. Eng	Subject	Basics of Civil and Mechanical Engineering
Semester	I	Course code	C107
Batch	B	No: of COs	11
No: of students	41	No: of POs	12
University Exam	YES	No: of PSOs	3
Assessment Year	2019-20	Faculty Name	Mrs. Devina Vipinan & Mr Arun K R

Assessment Tool	Series 1	Series 2	Asst 1	Asst 2					University
No: of Questions	7	7	2	2					1
Max Marks	50	50	25	25					
Weightage(%)	10	10	5	5					70
Attainment Cut-off(%)	60	60	60	60					C
Weaker Cut-off(%)	40	40	40	40					
Brighter Cut-off(%)	80	80	80	80					

Roll No	Name	Series 1	Series 1	Series 1	Series 1	Series 1	Series 1	Series 1	Series 2	Series 2	Series 2	Series 2
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q1	Q2	Q3	Q4
		C107.2	C107.2	C107.1	C107.2	C107.6	C107.7	C107.7	C107.2	C107.3	C107.2	C107.2
		Remember	Understand	Understand	Understand	Analyse	Understand	Remember	Remember	Understand	Understand	Understand
		5	4	6	10	10	10	5	5	8	6	6
1	ADORN IYPACHEN	5	3	4	8	8	8	4	5	6.5	6	4.5
2	AJITH GEORGE LOUIS	5	4	6	9	7	9	4	5	3.5	5	4.5
3	AKSHAY SANKAR P	4	3	3	6	7	9	4	4	6.5	4	1.5
4	ALBIN SABU	3	3	4	8	9	9	5	5	6.5	5	5.5
5	ANITTA MAVIN	5	4	4	9	10	10	5	5	3	5	5
6	ANN MARIA VINOD	5	4	5	9	8	10	5	5	7	5.5	4.5
7	ANN MARY JAMES	5	3	4	9	6	10	5	5	2.5	4	4.5
8	ANTONY JOSE	1	4	6	8	9	7	4	5	3	4.5	4.5
9	APARNA BIJU	5	4	3	7	8	8	5	5	4	6	4
10	ARYA MANOHAR	2	3	4	6	7	9	4	5	5	4	5
11	ASHIK GEORGE	4	3	4	6	9	9	4	4	4	3	1
12	ASHLY JOSHLY	4	4	6	8	9	9	4	5	6.5	5	3.5
13	ASHNA A A	4	4	4	9	10	10	5	5	4	5	4
14	BASIL BENNY	4	4	4	8	10	6	5	5	6	5.5	4.5
15	BENSON JOHN	4	3	4	8	8	9	5	4	4	4	4
16	BIJILA M ELDHO	3	3	2	7	6	6	5	3	4	1	2
17	BINUSREE P A	4	4	6	9	10	10	5	5	7	6	5
18	BIYANKA MANI	4	4	4	9	7	8	5	5	6.5	5	4.5
19	BRIJIT SAJU	5	4	5	7	9	9	4	5	3	6	5
20	DEVIKA SUBASH	4	3	5	9	10	9	5	5	4.5	6	4.5



VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

Vazhakulam P.O., Muvattupuzha-686 670, Kerala

Tel: 0485 2262211, 2262255, 9496335522

Email: vjcet@vjcet.org, www.vjcet.ac.in

Established in 2001

Managed by Catholic Diocese Kothamangalam



Roll No	Name	Series 1	Series 1	Series 1	Series 1	Series 1	Series 1	Series 1	Series 2	Series 2	Series 2	Series 2
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q1	Q2	Q3	Q4
		C107.2	C107.2	C107.1	C107.2	C107.6	C107.7	C107.7	C107.2	C107.3	C107.2	C107.2
		Remember	Understand	Understand	Understand	Analyse	Understand	Remember	Remember	Understand	Understand	Understand
		5	4	6	10	10	10	5	5	8	6	6
21	DINU JOY	4	4	3	8	9	9	1	5	4.5	6	3.5
22	EDWIN SIBY	3	3	4	4	6	5	5	5	0	4	2
23	FINU JAMES	4	4	5	9	8	7	5	5	3.5	6	4.5
24	IMRANKHAN A M	5	4	5	9	10	10	5	5	6.5	6	4.5
25	JIBIN JOY	2	2	5	7	9	9	4	5	6	6	2
26	JOE P B	3	3	4	7	8	10	5	5	6	6	3
27	JOYAL JOHNSON	2	4	4	7	10	10	3	5	6.5	5	5.5
28	JOYAL JOSE	4	4	4	8	10	7	5	5	6	6	5
29	KRISHNA S BIJU	0	0	0	0	10	9	5	5	6.5	5	5.5
30	LEON JOHNSON	4	3	4	5	10	6	5	5	2	4.5	4.5
31	MARIA REENA ROY	5	4	4	9	8	10	5	5	6.5	5.5	6
32	MEENU K R	0	4	3.5	5.5	7	8	5	5	4	2	3
33	MUHAMMAD SAFTHAR M A	0	4	3.5	1	8	9	4	5	0	4	2
34	PRANAV PRADEEP	2	3	4	7	8	9	5	4	4	3	2
35	REVATHY RAJEEVAN	5	4	5.5	9.5	10	10	5	5	7.5	6	4.5
36	ROHAN BIJOY	4	3	3	7	9	6	5	5	6	6	5
37	ROSEMOL JOHN	4	3	5	7	7	9	5	5	6	6	4
38	SANDRA SANTY	4	4	6	9	8	9	5	5	6	6	6
39	STEBIN JOSE	5	4	5	7	10	3	5	5	6	6	3
40	THOMASKUTTY TALVAR	3	0	3	5	3	4	2	5	5	5	2
41	TONY JOHN	2	3	2	4	6	5	4	5	3.5	3.5	1



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Roll No	Series 2	Series 2	Series 2	Asst 1	Asst 1	Asst 2	Asst 2	University
	Q5	Q6	Q7	Q1	Q2	Q1	Q2	Q1
	C107.2	C107.8	C107.9	C107.8	C107.2	C107.3	C107.4	
	Understand	Remember	Remember	Understand	Understand	Understand	Understand	
	10	10	5	15	10	15	10	
1	9	8	4	13	9	12	10	C+
2	9	9	4	15	10	14	10	B+
3	9	6	4	13	8	14	10	P
4	9	10	5	13	10	13	10	D
5	10	9	5	14	10	13	10	A
6	10	7	5	14	10	13	10	B
7	10	10	5	15	10	14	10	B+
8	9	8	4	13	9	12	10	C
9	8	7	5	14	10	14	10	B+
10	9	7	4	15	10	12	10	D
11	9	9	4	13	9	12	10	D
12	9	8	4	15	10	13	10	A
13	10	8	5	14	10	13	10	C
14	7	10	5	14	10	12	10	D
15	10	10	5	15	10	12	10	B+
16	6	3	5	14	10	13	10	C
17	10	10	5	15	10	14	10	B+
18	10	10	5	13	9	14	10	B
19	9	9	4	14	9	13	10	B
20	9	8	5	15	10	14	10	A+
21	9	9	5	14	10	14	10	B+
22	5	6	2	13	9	13	10	C+
23	10	10	5	14	10	14	10	A
24	10	10	5	14	10	13	10	A+
25	9	9	4	13	10	14	10	C+
26	10	10	5	13	10	13	10	D
27	10	10	5	14	10	14	10	C+
28	8	10	5	13	10	14	10	C+
29	9	10	5	15	10	14	10	B
30	0	2	0	13	10	12	10	F
31	10	10	5	14	10	13	10	A
32	8	8	5	13	10	0	10	D
33	1	0	4	14	9	12	10	P
34	4	8	5	14	10	13	10	C+
35	9	10	5	14	10	14	10	A+
36	6	9	5	14	10	13	10	B
37	9	8	5	15	10	13	10	B+
38	10	10	5	14	10	14	10	A+
39	8	9	5	15	9	12	10	B



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Roll No	Series 2	Series 2	Series 2	Asst 1	Asst 1	Asst 2	Asst 2	University
	Q5	Q6	Q7	Q1	Q2	Q1	Q2	Q1
	C107.2	C107.8	C107.9	C107.8	C107.2	C107.3	C107.4	
	Understand	Remember	Remember	Understand	Understand	Understand	Understand	
	10	10	5	15	10	15	10	
40	4	7	2	14	10	13	10	P
41	5	4	4	13	6	13	10	C+



[Signature]
Dr. K. Shunmugan
HOD, MED

[Signature]
Dr. K. Shunmugan
HOD, MED
[Signature]
Devina Vijayan



VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM

Department of Civil Engineering, Electronics & Communication

CO-PO & CO-PSO Mapping

Semester	I
Batch	B
Assessment Year	2019-20

Subject	Basics of Civil and Mechanical Engineering
Course code	C107
Faculty Name	Mrs. Devina Vipinan & Mr Arun K R

CO-PO MAPPING MATRIX

Sl.No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C107.1	3	-	-	-	-	3	2	2	-	-	-	-
C107.2	3	2	-	1	3	-	-	3	-	-	-	-
C107.3	3	2	-	-	3	-	-	-	2	-	-	-
C107.4	3	2	-	-	3	-	-	-	2	-	-	-
C107.5	3	2	-	-	3	2	3	-	2	-	-	-
C107.6	3	2	-	-	-	-	-	-	-	-	-	-
C107.7	3	1	-	-	-	-	-	-	-	-	-	-
C107.8	3	1	-	-	-	-	-	-	-	-	-	-
C107.9	3	2	-	-	-	-	-	-	-	-	-	-
C107.10	3	1	-	-	-	-	-	-	-	-	-	-
C107.11	3	-	-	-	-	-	-	-	-	-	-	-

CO-PSO MAPPING MATRIX

Sl.No	PSO1	PSO2	PSO3									
C107.1	-	-	-									
C107.2	-	-	-									
C107.3	-	-	-									
C107.4	-	-	-									
C107.5	-	-	-									
C107.6	-	-	-									
C107.7	-	-	-									
C107.8	-	-	-									
C107.9	-	-	-									
C107.10	-	-	-									
C107.11	-	-	-									

COURSE END SURVEY

C107.1	C107.2	C107.3	C107.4	C107.5	C107.6	C107.7	C107.8	C107.9	C107.10	C107.11	
3	3	3	3	3	3	3	3	3	3	3	



Handwritten signature
HOD, CED

Handwritten signature
Devina Vipinan

Handwritten signature
Dr. K. Shunmugan
HOD, MED



VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM

Department of Civil Engg./Elec. & Comm. Engg.

ATTAINMENT

Semester	I
Batch	B
Assessment Year	2019-20

Subject	Basics of Civil and Mechanical Engineering
Course code	C107
Faculty Name	Mrs. Devina Vipinan & Mr Arun K R

CO ATTAINMENT MATRIX

Assessment Tools	C107.1	C107.2	C107.3	C107.4	C107.5	C107.6	C107.7	C107.8	C107.9	C107.10	C107.11	
Series 1	3	3	-	-	-	3	3	-	-	-	-	
Series 2	-	3	1	-	-	-	-	3	3	-	-	
Asst 1	-	3	-	-	-	-	-	3	-	-	-	
Asst 2	-	-	3	3	-	-	-	-	-	-	-	
University	3	3	3	3	3	3	3	3	3	3	3	

CO Direct Attainment	3	3	2.6	3	3	3	3	3	3	3	3	
CO Indirect Attainment	3	3	3	3	3	3	3	3	3	3	3	
CO Attainment	3	3	2.68	3	3	3	3	3	3	3	3	
CO Attainment Avg	2.97											

COURSE - PO MATRIX

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C107(Mapped)	3	1.67	-	1	3	2.5	2.5	2.5	2	-	-	-
C107(Attained)	2.97	1.64	-	1	2.92	2.5	2.5	2.5	1.93	-	-	-
C107(Feedback)	3	3	-	3	3	3	3	3	3	-	-	-

COURSE - PSO MATRIX

	PSO1	PSO2	PSO3									
C107(Mapped)	-	-	-									
C107(Attained)	-	-	-									
C107(Feedback)	-	-	-									



Devina Vipinan

Dr. S. Sharmugan
HOD, MED



KTU Course Outcome Attainment Sheet - LAB

VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM

Batch	Computer Science & Engne	Subject	System Software Lab
Semester	V	Course code	C308
Branch	A	No: of COs (for course)	6
No: of students	54	Faculty Name	Dona Jose

Assessment Tool	Daily Eval	Final Test	
No: of Days	9	1	

Brighter Student
Weaker Student

Roll No	Name	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	Final Test
		C308.1	C308.1; C308.2	C308.2; C308.3	C308.4; C308.5	C308.6	C308.6	C308.6	C308.6	C308.6	C308.1; C308.2; C308.3; C308.4; C308.5;
		Select COs	Select COs	Select COs	Select COs	Select COs	Select COs	Select COs	Select COs	Select COs	Select COs
		70	70	70	70	70	70	70	70	70	100
1	ABIN P JOY	53	54	51	54	53	50	52	64	67	46
2	ABINA GEORGE	58	58	56	57	57	56	56	70	70	52
3	AKHIL P VIJAYAN	53	53	54	58	54	53	52	67	67	67
4	AKSA GEORGE	60	60	61	61	62	61	62	70	70	70
5	ALAN SEBASTIAN	47	48	46	50	48	49	47	64	65	61
6	ALBIN ROY	68	67	67	68	68	69	69	70	69	47
7	AMITHA MANI	70	70	70	70	70	70	70	70	69	100
8	ANIRUDH RAJEEV	68	67	67	68	68	68	68	70	68	71
9	ANNA MARIA SAJU	70	69	69	70	70	68	69	70	69	68
10	ANNIE ROY JOHN	64	65	65	66	66	66	66	70	70	76
11	ANNS MOL VINSON	56	55	55	54	59	57	58	69	69	53
12	ARSHA PAULOSE	54	55	54	56	56	57	55	65	65	61
13	ASWIN C ASOK	55	56	54	57	57	58	57	70	69	73
14	AVINASH	56	54	56	54	54	54	55	68	66	79
15	BASIL SANTHOSH	56	60	57	57	57	58	59	70	70	44
16	BHAGYA SANKAR	69	68	69	69	68	69	68	70	70	77
17	BINCY CHRISTINE SABU	55	56	56	56	56	54	55	68	69	59
18	CHRIS JJI THANKACHEN	57	56	58	58	57	59	60	70	70	67
19	DEEPAK D KRISHNA	55	54	58	56	55	56	56	70	69	77
20	DELJO GEORGE JOSL	70	70	69	70	70	70	69	70	69	95
21	DELVIN TOMY	47	48	49	47	48	49	49	65	70	54



VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

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Vazhakulam P.O., Muvattupuzha-686 670, Kerala

Tel: 0485 2262211, 2262255, 9496335522

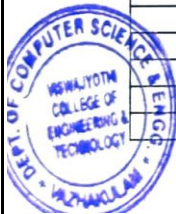
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Roll No	Name	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	Final Test
		C308.1	C308.1: C308.2	C308.2: C308.3	C308.4: C308.5	C308.6	C308.6	C308.6	C308.6	C308.6	C308.1: C308.2: C308.3: C308.4: C308.5:
		Select CDs	Select CDs	Select CDs	Select CDs	Select CDs	Select CDs	Select CDs	Select CDs	Select CDs	Select CDs
		70	70	70	70	70	70	70	70	70	100
22	DIVYA SABU	48	52	52	53	53	54	54	55	70	44
23	DONAL SHIJAN	64	65	64	65	64	65	64	67	64	100
24	EBIN SHABU	65	66	64	65	66	67	65	66	67	73
25	ELESEBATH ROY	61	63	62	61	61	61	61	61	68	54
26	ELSON JOSE	69	69	69	70	70	68	70	70	70	100
27	EVLIN JOI	49	50	54	55	53	55	54	55	70	76
28	FEBIN BENNY	70	70	69	70	70	69	70	70	70	67
29	GEORGE JOSI	70	70	70	70	70	70	70	70	70	82
30	HEJA VINCENT	54	55	54	55	54	56	55	68	70	58
31	JESSEY VINCENT	63	62	61	63	61	64	65	70	70	57
32	JIIYA BRIGIT JAISON	60	61	62	61	61	60	61	70	70	79
33	JOBIN VINCENT	66	67	67	68	66	68	68	70	0	72
34	JOEL TOMY GEORGE	70	70	70	70	70	70	70	70	70	95
35	JOSEPH ROBY	64	63	63	64	64	62	64	64	0	48
36	KIRAN RAMSHEE	48	48	51	51	49	50	50	65	0	49
37	LEO JOHNS	70	70	70	70	70	70	70	70	0	88
38	MERIN VARGHESE	62	63	63	63	62	62	62	70	70	82
39	NEHA JOSHIY	57	56	57	58	57	59	59	70	70	76
40	NIHAL NAZ	70	70	69	70	70	68	70	70	70	46
41	NIMMY ANN NELSON	64	64	64	63	64	65	64	67	70	58
42	PAUL BARACKAL	65	65	67	65	66	65	66	69	0	85
43	RESMI RAJU	55	55	57	55	55	55	56	69	70	52
44	ROHINI ANIL KUMAR	70	70	70	70	70	68	70	70	0	43
45	ROSHY R	58	59	60	61	60	62	61	70	0	66
46	ROY JOSEPH	70	67	68	68	68	69	69	70	70	70
47	RYAN THOMAS TONEESH	63	63	64	63	63	65	63	70	70	93
48	S KARTHIKA	65	64	66	65	64	65	64	70	70	60
49	SANDRA JAISON	58	57	58	59	58	57	56	69	70	70
50	SEAN SANTHOSH JOSEPH	69	70	69	70	70	68	68	70	0	98
51	SNEHA ANNA ROY	58	58	58	59	60	57	58	70	70	68
52	STEPHEN GEORGE	59	61	58	61	60	58	60	70	70	51
53	SUMITH SUNNY	64	64	64	65	64	65	64	67	0	44
54	TESLIVA SHAJI	59	61	59	60	62	62	61	70	70	51



HEAD, COMPUTER SCIENCE & ENGG DEPT.,
Viswajyothi College Of Engg. & Tech.
Vazhakulam P.O., Muvattupuzha



VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM

Department of Computer Science & Engineering

Course- PO Attainment Calculations

Semester	V
Batch	A

Subject	System Software Lab
Course code	C308
Faculty Name	Dona Jose

CO-PO MAPPING MATRIX

SLNO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C308.1	3	-	-	2	2	-	-	-	-	-	-	1
C308.2	2	2	2	2	1	-	-	-	-	-	-	2
C308.3	2	2	2	2	2	-	-	-	-	-	-	1
C308.4	2	3	3	3	-	-	-	-	-	-	-	2
C308.5	2	2	3	1	1	-	-	-	-	-	-	1
C308.6	2	-	2	2	1	-	-	-	-	-	-	1

CO-PSO MAPPING MATRIX

SLNO	PSO1	PSO2	PSO3
C308.1	3	2	-
C308.2	2	3	1
C308.3	2	3	2
C308.4	3	3	1
C308.5	2	3	2
C308.6	3	2	2

CO ATTAINMENT MATRIX

Assessment Tools	C308.1	C308.2	C308.3	C308.4	C308.5	C308.6
Daily Eval	3	3	3	3	3	3
Final Test	3	3	3	3	3	3
CO Attainment	3	3	3	3	3	3
CO Attainment Avg	3					

COURSE - PO MATRIX

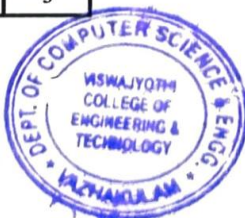
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C308(Actual)	2.17	2.25	2.4	2	1.4	-	-	-	-	-	-	1.33
C308(Attained)	2.17	2.25	2.4	2	1.4	-	-	-	-	-	-	1.33
C308(Feedback)	3	3	3	3	3	-	-	-	-	-	-	3

COURSE - PSO MATRIX

Course Code	PSO1	PSO2	PSO3
C308(Actual)	2.5	2.67	1.6
C308(Attained)	2.5	2.67	1.6
C308(Feedback)	3	3	3

Total PO & PSO Assessment using Direct Assessment Tools (considering internal assessment and university exam)

Dona Jose
Dona Jose



Amel Austine
AMEL AUSTINE

HEAD, COMPUTER SCIENCE & ENGG DEPT.
Viswajyothi College Of Engg. & Tech.
Vazhakulam P.O., Muvattupuzha



VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,
VAZHAKULAM P.O, MUVATTUPUZHA, ERNAKULAM - 686670

DEPARTMENT OF CIVIL ENGINEERING
COURSE OUTCOME ATTAINMENT OF ALL COURSES
(2016-2020 BATCH)

Semester	Course	CO1	CO2	CO3	CO4	CO5	CO6	CO Attainment
S1	C101	2.20	2.20	2.20	2.20	2.20	2.20	2.20
	C102	3.00	2.93	3.00	3.00	3.00	3.00	2.99
	C105	2.90	2.90	3.00	3.00	2.90	3.00	2.95
	C106	2.70	2.70	2.70	2.70	2.70	2.70	2.70
	C112	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	C115	2.97	2.90	2.80	3.00	2.40	2.40	2.74
	C119	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	C121	3.00	3.00	3.00	3.00	3.00	-	3.00
S2	C117	1.50	1.50	1.50	3.00	-	-	1.88
	C103	2.85	2.90	2.80	2.95	3.00	3.00	2.92
	C104	2.90	2.80	2.90	2.95	3.00	3.00	2.93
	C114	3.00	3.00	3.00	3.00	2.75	2.90	2.94
	C118	2.40	2.90	3.00	3.00	2.80	3.00	2.85
	C116	3.00	3.00	3.00	3.00	3.00	-	3.00
	C120	2.77	2.75	2.75	2.67	2.75	2.45	2.69
	C122	3.00	3.00	3.00	3.00	3.00	1.50	2.75
	C124	3.00	3.00	3.00	3.00	3.00	-	3.00



VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

Vazhakulam P.O., Muvattupuzha-686 670, Kerala
Tel: 0485 2262211, 2262255, 9496335522
Email: vjcet@vjcet.org, www.vjcet.ac.in

Established in 2001
Managed by Catholic Diocese Kothamangalam



S3	C201	2.75	2.75	2.75	2.75	3.00	2.75	2.79
	C202	2.75	2.80	2.60	3.00	3.00	2.90	2.84
	C203	3.00	3.00	3.00	2.60	2.85	1.50	2.66
	C204	0.60	0.57	0.60	0.30	0.60	0.55	0.54
	C205	2.95	2.90	2.90	2.95	3.00	3.00	2.95
	C206	2.90	3.00	3.00	2.50	2.80	2.85	2.84
	C207	2.90	2.80	3.00	3.00	3.00	3.00	2.95
	C208	3.00	3.00	3.00	3.00	3.00	3.00	3.00
S4	C209	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	C210	3.00	3.00	3.00	2.93	2.40	2.40	2.79
	C211	2.25	2.85	3.00	2.25	2.85	3.00	2.70
	C212	2.55	2.50	2.55	2.55	2.10	2.55	2.47
	C213	2.65	2.50	2.65	2.65	2.65	1.15	2.38
	C214	3.00	2.93	3.00	2.93	3.00	3.00	2.98
	C215	3.00	2.10	3.00	3.00	3.00	2.10	2.70
	C216	3.00	3.00	3.00	3.00	3.00	3.00	3.00
S5	C301	2.75	2.75	2.75	2.75	2.75	-	2.75
	C302	3.00	3.00	2.70	3.00	2.85	3.00	2.93
	C303	3.00	2.85	2.93	2.85	3.00	2.85	2.91
	C304	3.00	3.00	3.00	3.00	2.10	3.00	2.85
	C305	2.93	2.93	3.00	2.85	3.00	3.00	2.95
	C306L1	2.85	2.70	2.55	2.55	2.55	3.00	2.70
	C306L2	2.70	3.00	2.78	2.25	2.10	3.00	2.64



S6	C307	3.00	3.00	3.00	3.00	2.85	2.93	2.96
	C308	3.00	3.00	3.00	-	-	-	3.00
	C309	3.00	3.00	3.00	3.00	-	-	3.00
	C310	3.00	3.00	3.00	1.50	1.50	-	2.40
	C311	3.00	2.70	2.55	3.00	2.55	1.50	2.55
	C312	3.00	2.40	3.00	3.00	2.40	3.00	2.80
	C313	3.00	2.93	3.00	2.85	3.00	3.00	2.96
	C314	2.85	2.70	2.70	2.40	3.00	2.10	2.63
	C315L1	3.00	3.00	3.00	3.00	2.85	3.00	2.98
	C315L2	2.35	2.65	2.65	2.50	1.75	2.65	2.43
	C316	3.00	3.00	3.00	3.00	2.55	2.55	2.85
	C317	3.00	3.00	3.00	3.00	3.00	-	3.00
S7	C318	3.00	3.00	3.00	3.00	3.00	-	3.00
	C401	3.00	-	-	-	-	-	3.00
	C402	3.00	2.93	3.00	2.55	2.40	2.85	2.79
	C403	2.65	2.05	2.05	2.65	1.75	2.65	2.30
	C404	3.00	3.00	3.00	2.55	2.93	3.00	2.91
	C405	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	C406L1	2.48	2.70	2.70	2.55	-	-	2.61
	C406L2	3.00	2.93	3.00	3.00	3.00	3.00	2.99
S8	C407	2.85	3.00	3.00	2.85	2.10	3.00	2.80
	C408	3.00	3.00	3.00	3.00	3.00	-	3.00
S8	C409	3.00	3.00	3.00	3.00	3.00	-	3.00



VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

Vazhakulam P.O., Muvattupuzha-686 670, Kerala

Tel: 0485 2262211, 2262255, 9496335522

Email: vjcet@vjcet.org, www.vjcet.ac.in

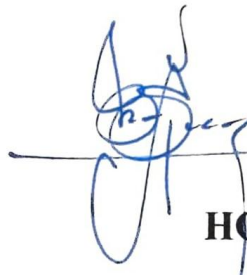
Established in 2001

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C410	2.70	3.00	3.00	3.00	3.00	3.00	2.95
C411L1	2.85	3.00	3.00	3.00	3.00	3.00	2.98
C412L31	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C412L23	3.00	3.00	3.00	3.00	-	-	3.00
C412L40	3.00	3.00	2.85	3.00	3.00	3.00	2.98
C412L36	3.00	3.00	3.00	3.00	2.10	-	2.82
C413	2.10	2.10	2.10	2.10	2.10	2.10	2.10




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VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,
VAZHAKULAM P.O, MUVATTUPUZHA, ERNAKULAM - 686670

DEPARTMENT OF CIVIL ENGINEERING

PROGRAM OUTCOME ATTAINMENT OF ALL COURSES (2016-2020 BATCH)

Semester	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
S1	C101	1.83	1.59	1.71	1.47	-	1.10	-	1.47	1.47	-	-	1.34
	C102	1.83	1.00	1.00	1	1.00	1.00	-	-	-	-	-	1.00
	C105	2.95	2.95	1.97	2	2.50	-	0.99	1.97	-	2	-	1.24
	C106	2.40	1.65	1.65	-	0.90	0.90	1.20	0.90	0.90	1.05	0.90	2.70
	C112	1.00	-	1.00	-	2	2	3.00	2.00	2	1.00	-	1.17
	C115	2.42	2.45	1.83	1.83	0.92	1.14	1.00	-	-	1.00	-	0.92
	C119	2.00	2.00	1.20	1.00	1.00	-	1.00	1.00	2.00	1	1	1.00
	C121	2.00	1.75	1.50	2.00	-	2.00	2.00	2.00	2.00	1.00	1.00	1.00
	C123	1.66	1.13	0.66	0.63	-	-	-	-	1	1	-	1.25
S2	C117	2.92	3.00	2.00	1.00	1.00	1.00	-	-	0.98	-	-	1.63
	C103	1.95	2.00	2.00	2.00	2.00	2.00	-	2.00	-	-	-	1.97
	C104	2.95	2.00	3.00	2.00	1.00	-	1.00	-	2.95	-	1.22	2.95
	C114	1.90	1.00	2.00	1.00	2.00	2.00	1.00	0.92	0.93	-	-	1.90
	C118	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.75	2.33	2.33	2.33	2.60
	C116	1.69	1.00	1.00	1.00	1.00	2.00	1.00	-	0.85	-	0.98	1.69
	C120	1.84	1.00	2.00	-	2.00	2.00	1.00	0.90	1.80	0.92	1.00	2.00
	C122	3.00	2.00	-	-	-	-	-	2.00	2.00	-	-	2.00



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S3	C124	1.56	1.17	0.92	-	1.71	0.93	0.94	0.93	0.93	1.86	1.56	1.86
	C201	2.84	2.84	1.90	1.61	0.97	0.99	-	-	0.95	2.00	-	1.92
	C202	2.89	2.89	1.76	0.97	0.98	0.98	-	0.98	-	1.17	1.00	2.72
	C203	0.51	0.51	0.53	0.40	-	0.35	0.60	-	-	-	-	0.36
	C204	2.29	1.97	-	-	-	1.95	1.47	1.47	0.99	1.48	1.31	2.95
	C205	2.84	2.54	2.07	1.77	2.20	0.94	1.86	1.76	1.60	1.57	1.18	2.84
	C206	-	1.87	3.00	1.87	-	-	-	1.97	-	-	2.00	1.94
	C207	3.00	2.00	2.40	2.00	3.00	2.33	-	2.00	1.50	1.50	1.50	1.67
S4	C208	3.00	3.00	2.80	2.00	2.60	1.83	2.00	1.00	3.00	1.00	1.00	2.00
	C209	2.66	2.36	2.02	1.86	1.45	1.32	-	-	1.00	-	-	2.26
	C210	2.70	2.70	1.80	0.90	0.90	1.80	1.30	-	-	1.80	0.90	2.70
	C211	1.36	1.69	1.67	1.10	-	1.65	1.20	1.64	0.82	1.65	-	1.90
	C212	2.25	2.25	2.11	1.88	-	1.94	1.65	1.01	-	1.50	1.48	1.50
	C213	2.98	2.98	2.81	2.81	-	1.82	0.99	0.99	0.99	0.99	0.99	2.98
	C214	-	1.00	-	-	-	1.00	-	1.23	1.60	1.88	-	1.48
	C215	2.83	2.00	2.00	2.00	1.00	1.67	1.33	2.00	2.83	2.67	1.33	2.33
S5	C216	2.15	1.74	1.42	1.71	-	1.34	-	-	2.20	1.84	1.74	1.84
	C301	2.93	2.93	2.93	2.93	2.93	0.98	0.98	1.79	2.93	0.98	1.95	2.93
	C302	2.90	2.90	2.73	2.73	-	1.78	1.45	1.00	1.95	1.77	1.74	2.90
	C303	2.85	2.85	2.85	2.85	2.00	1.90	1.90	1.90	1.28	2.50	3.00	2.85
	C304	2.95	2.30	1.97	1.97	1.96	2.00	1.00	1.64	1.64	1.97	0.99	2.95
	C305	2.70	2.53	2.47	2.02	-	1.94	2.41	0.85	0.85	0.89	1.70	2.73
	C306L 1	2.64	2.40	2.40	2.03	1.09	1.76	1.59	1.60	0.88	1.98	1.58	2.64
	C306L 2	2.33	2.40	1.99	2.49	1.92	1.30	1.42	1.83	2.32	1.61	1.00	2.49



S6	C307	3.00	3.00	3.00	3.00	2.67	1.67	1.67	2.00	2.67	2.67	3.00	2.67
	C308	3.00	3.00	3.00	3.00	-	1.00	1.00	1.00	2.00	2.00	1.00	3.00
	C309	2.50	2.25	2.50	2.13	2.13	1.63	2.25	1.60	1.60	2.10	1.10	2.10
	C310	2.78	2.78	2.78	1.85	-	1.85	0.93	0.93	-	0.93	-	2.78
	C311	2.80	2.80	2.80	1.87	1.45	1.87	0.93	1.87	0.93	1.87	0.93	2.80
	C312	2.31	1.79	2.00	2.18	2.45	0.95	-	1.90	0.95	-	-	1.65
	C313	2.63	2.63	2.63	2.63	1.53	1.64	1.57	1.34	1.32	1.91	1.59	2.32
	C314	2.98	-	-	-	-	-	-	2.81	2.49	2.15	2.15	2.81
	C315L ₁	2.43	2.17	2.44	1.54	2.50	2.43	2.43	-	-	-	-	2.43
	C315L ₂	2.55	2.21	1.95	1.90	1.28	1.51	1.57	1.90	1.47	1.18	1.00	1.90
	C315L ₃	3.00	2.60	3.00	2.60	2.00	3.00	3.00	3.00	3.00	1.40	2.00	3.00
	C316	2.40	2.20	2.20	2.20	3.00	2.00	2.00	2.40	2.20	2.80	2.00	2.20
S7	C317	3.00	2.00	1.00	1.00	-	1.00	1.00	2.00	3.00	3.00	-	3.00
	C318	2.78	2.78	2.78	1.85	-	1.85	0.93	0.93	-	0.93	-	2.78
	C401	2.79	1.86	2.79	1.86	0.93	1.86	0.93	1.86	0.93	0.93	-	2.79
	C402	2.30	2.30	2.15	2.15	-	1.39	1.33	0.89	1.42	1.39	1.31	2.30
	C403	2.30	2.14	2.36	2.30	1.00	2.28	2.28	2.78	2.95	2.62	2.62	2.95
	C404	2.33	1.83	1.67	1.50	2.00	1.50	2.00	1.00	-	1.17	1.00	3.00
	C405	2.61	2.61	2.61	2.61	1.32	2.61	2.05	2.40	2.19	2.39	2.40	2.61
	C406L ₁	2.66	2.66	2.82	2.49	1.99	2.16	1.67	1.00	-	1.33	1.00	2.99
	C406L ₂	2.80	-	-	-	0.70	2.00	2.00	-	-	-	2.93	2.80
	C407	2.80	2.50	2.00	2.10	2.25	-	1.88	-	2.38	2.34	2.20	2.00
	C408	3.00	3.00	1.00	-	3.00	2.60	3.00	3.00	3.00	3.00	1.00	3.00



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S8	C409	2.81	2.81	2.65	1.98	1.00	2.31	2.49	0.99	0.99	1.82	1.99	2.98
	C410	2.98	2.48	2.48	2.48	2.48	0.99	0.99	1.83	2.98	0.99	1.99	2.98
	C411L1	1.50	1.92	1.67	1.50	2.17	1.75	1.50	1.67	2.00	1.25	1.17	2.25
	C412L31	2.65	2.00	2.93	2.00	1.97	2.00	2.00	1.48	1.95	1.95	-	1.98
	C412L24	0.94	-	-	-	-	2.82	1.88	2.82	-	-	-	1.48
	C412L40	1.87	1.40	2.10	1.40	1.40	1.40	1.40	1.05	1.40	1.40	-	1.40
	C412L36	1.00	2.00	1.00	1.00	1.50	1.50	1.00	2.00	2.00	1.33	1.00	1.50
	C413	3.00	3.00	3.00	3.00	2.50	3.00	3.00	2.00	3.00	3.00	2.50	3.00

Tools	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
70% of Direct Attainment	1.71	1.55	1.47	1.33	1.24	1.17	1.12	1.16	1.26	1.18	1.09	1.56
30% of Indirect Attainment	0.71	0.65	0.65	0.66	0.68	0.62	0.63	0.68	0.65	0.69	0.65	0.69
Total Attainment	2.42	2.20	2.12	1.99	1.92	1.79	1.75	1.84	1.91	1.87	1.74	2.25



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SHINE GEORGE HOD-CE



**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,
VAZHAKULAM P.O, MUVATTUPUZHA, ERNAKULAM - 686670**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE OUTCOME ATTAINMENT OF ALL COURSES (2016-20 BATCH)

Semester	Course	CO1	CO2	CO3	CO4	CO5	CO6	CO Attainment
S1	C101	3	3	3	3	3	3	3
	C102	3	2.95	3	3	3	-	2.95
	C103	2.565	2.5	2.55	2.6	2.6	2.6	2.57
	C104	3	3	3	3	3	3	3
	C105	3	3	3	3	3	3	3
	C106	2.8	2.9	3	3	3	2.4	2.85
	C107	3	3	3	3	3	3	3
	C108	3	3	3	3	3	3	3
	C109	3	3	3	3	3	-	3
S2	C-110	3	3	3	3	3	-	3
	C111	2.7	2.885	3	2.85	3	3	2.91



	C112	2.965	2.635	3	3	3	2.55	2.86
	C113	3	3	3	3	3	3	3
	C127	3	3	2.6	3	2.4	2.4	2.73
	C115	3	3	2.8	3	2.4	3	2.87
	C116	3	3	2.8	3	2.4	-	2.84
	C218	2.5	2.5	2.5	2.5	2.2	-	2.44
	C118	3	3	3	3	3	-	3
S3	C201	2.9	2.9	3	3	3	2.8	2.93
	C202	3	3	3	2.4	3	2.9	2.88
	C203	3	2.87	3	3	3	3	2.98
	C204	2.7	2.7	2.7	2.7	2.4	2.4	2.6
	C205	3	2.7	2.7	3	3	-	2.88
	C206	2.9	2.7	3	3	3	2.9	2.92
	C207	3	3	3	3	1.5	1.5	2.5
	C208	3	3	3	3	3	-	3



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S4	C209	3	2.1	3	3	3	2.1	2.7
	C210	3	3	3	2.7	2.7	3	2.9
	C211	2.965	2.4	2.7	2.4	3	3	2.74
	C212	3	3	2.84	2.4	2.65	2.7	2.77
	C213	3	3	2.9	2.4	3	2.4	2.78
	C214	3	3	3	3	2.4	2.4	2.8
	C215	2.75	2.75	2.75	2.5	2.5	-	2.65
	C216	3	2.25	3	3	2.25	-	2.63
S5	C301	3	2.95	2.85	3	2.7	2.4	2.82
	C302	3	3	2.7	2.1	3	-	2.76
	C303	3	3	3	2.7	2.7	3	2.9
	C304	3	3	3	2.9	2.5	3	2.9
	C305	3	2.9	3	2.5	3	2.4	2.8
	C306	3	3	3	3	3	3	3
	C307	3	3	3	-	-	-	3



	C308	2.75	2.75	2.75	2.75	2.75	2.75	2.75
	C309	3	3	3	3	3	-	3
S6	C310	2.85	2.9	3	2.6	2.95	3	2.88
	C311	3	3	3	2.4	3	3	2.9
	C312	3	2.85	2.9	2.625	3	2.7	2.85
	C313	3	2.95	3	3	2.4	-	2.87
	C314	3	3	3	3	3	3	3
	C315L4	3	3	3	3	3	2.4	2.9
	C315L2	2.2	2.2	2	2.1	2.1	1.6	2.03
	C316	2.5	3	-	-	-	-	2.75
	C317	3	3	3	3	3	-	3
	C318	3	-	-	-	-	-	3
S7	C401	3	3	2.965	2.4	2.95	3	2.89
	C402	3	3	3	3	3	3	3
	C403	3	3	3	3	2.1	2.1	2.7



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	C404	3	3	3	3	3	3	3
	C405	2.7	3	2.95	2.9	2.4	3	2.83
	C406L2	3	3	3	3	2.4	2.4	2.8
	C407	3	3	3	3	3	-	3
	C408	3	3	3	3	-	-	3
S8	C409	3	3	3	3	3	-	3
	C410	3	2.85	3	3	3	-	2.97
	C411L5	3	3	3	3	3	3	3
	C412L32	2.85	2.7	2.4	3	3	3	2.83
	C412L36	3	3	3	3	-	-	3
	C412L13	3	3	3	3	3	3	3
	C413	3	3	3	3	3	3	3


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**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,
VAZHAKULAM P.O, MUVATTUPUZHA, ERNAKULAM - 686670**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**PROGRAM OUTCOMES ATTAINMENT OF ALL COURSES
(2016-20 BATCH)**

Sem ester	Cou rse	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
S1	C101	2.5	2.17	2.33	2	-	1.5	-	2	2	-	-	1.83
	C102	1.83	1	0.995	0.995	1	1	-	-	-	-	-	1
	C103	2.57	1.85	2.285	1.995	1.295	-	0.855	-	2.57	-	1.075	2.57
	C104	2.6	2.6	2.6	3	-	-	-	-	-	-	-	1.5
	C105	1	-	1	-	2	1.5	3	2	2	1	-	1.17
	C106	1.9	1.44	1.6	0.95	1.6	1.9	0.94	0.97	0.98	-	-	1.9
	C107	2	2	1.2	1	1	-	1	1	2	1	1	1
	C108	2.83	2.67	2.67	3	2	1	-	1.8	2	-	2	1.2
	C109	3	2	-	-	-	-	-	2	2	-	-	2
S2	C110	3	3	2	1	1	1	-	-	1	-	-	1.67
	C111	1.855	1.835	1.73	1.6	1.785	1.87	-	2	-	-	-	1.905
	C112	2.86	2.86	1.82	1.9	2	-	0.955	1.905	-	1.95	-	0.955
	C113	3	3	3	3	3	2.5	2.6	2.75	2.33	2.33	2.33	2.6
	C127	1.97	1.82	1.82	1.82	2.73	1.82	-	-	-	-	-	1.82



VISWAJYOTHI

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	C115	1.9	1.75	1.525	0.965	1.2	1.43	1.13	2.4	0.95	-	1.13	1.9
	C116	2	1	2	-	2	2	1	1	2	1	1	2
	C218	2.165	2.165	2.165	0.835	2.165	-	-	1.665	1.665	1.665	1.665	1.665
	C118	1.67	1.25	1	-	1.83	1	1	1	1	2	1	2
S3	C201	2.685	2.52	2.12	1.79	0.87	1.215	-	2	1.48	2	-	1.87
	C202	2.885	2.255	1.485	-	-	-	-	-	-	-	-	-
	C203	1.98	2.32	2.16	1.99	2	-	2	-	-	-	-	1.32
	C204	1.795	1.71	1.71	1.71	1.765	1.51	0.8	0.8	1.2	-	-	1.71
	C205	2.235	2.325	2.235	1.265	1.465	0.945	-	-	0.975	-	0.995	1.945
	C206	-	1.8	3	1.8	-	-	-	1.965	-	-	1.98	1.935
	C207	1.6	1.665	1.5	1.665	1.17	1.415	1.33	1.165	1.665	1.33	1.33	1.665
	C208	3	2.4	2.2	1.5	3	2	-	-	2	2	-	1.8
S4	C209	-	1	-	-	-	1	-	1.23	1.6	1.88	-	1.48
	C210	2.75	2.435	2.085	1.935	1.475	1.38	-	-	1	-	-	2.27
	C211	2.29	1.895	1.8	1.87	1.145	0.87	1	0.93	1	1.5	-	1.98
	C212	1.905	1.87	1.84	1.82	1.85	1.745	-	-	-	-	1.875	1.855
	C213	1.86	2.62	2.62	1.63	1.63	1.3	-	-	1.86	-	-	1.53
	C214	1.82	1.785	1.8	1.8	1.76	2	-	-	0.92	0.92	1.8	1.87
	C215	1.615	1.615	1.915	0.885	2.65	1.765	-	0.885	0.885	0.885	-	0.885
	C216	1.8	1.67	1.8	1.75	-	0.75	-	0.9	1.875	-	-	1.8



S5	C301	2.525	1.705	1.745	2.195	-	-	-	-	1.875	-	-	1.42
	C302	2.76	1.64	1.64	1.22	0.87	-	-	-	-	-	-	1.62
	C303	1.635	2	1.78	1.33	1.95	-	-	2	-	2	-	1.45
	C304	2.265	2.57	2.24	1.935	-	-	-	-	-	-	-	1.63
	C305	1.87	1.72	1.91	1.865	-	-	-	-	-	-	-	1.55
	C306 L1	3	2.83	2.33	2	2	2	2	1	1.83	1	-	1
	C307	3	3	3	3	3	3	3	3	3	3	3	3
	C308	1.96	2.02	2.15	1.82	1.265	-	-	-	-	-	-	1.205
	C309	2.485	1.75	1.7	2	1.8	-	-	3	2.5	3	3	1.665
S6	C310	2.72	1.12	0.965	-	0.95	-	-	-	-	-	-	0.96
	C311	2.9	1.93	1.93	1.77	-	-	-	-	2.9	-	-	1.93
	C312	1.61	1.41	1.23	1.315	1.58	1.3	0.95	0.95	-	2	-	0.95
	C313	2.87	2.785	2.655	2.95	2.59	2.185	2.4	1.465	2.87	2.67	2.87	-
	C314	3	-	-	-	-	-	-	2.83	2.5	2.17	2.17	2.83
	C315 L4	1.93	2.1	1.93	1.92	1.4	-	-	-	-	-	-	2
	C315 L2	1.445	1.56	1.035	1.36	1.645	-	-	-	-	-	-	1.81
	C316	1.835	1.665	1.5	1.335	1.335	-	-	-	1.665	1.335	-	1.415
	C317	2.4	2	1.75	1.4	1.75	1	-	2	2	1	1	2
	C318	2	2	-	-	-	-	-	-	1	2	-	2



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S7	C401	2.72	2.72	1.76	1.91	-	-	-	1.885	2.39	-	-	1.92
	C402	2.83	2	2.83	1.5	2.17	-	-	2	-	2	2	-
	C403	2.08	1.92	1.82	1.27	1.02	-	-	-	-	-	-	1.18
	C404	2	2	2	1.75	1.5	1	1	1	1	2.33	1	2
	C405	1.85	2.015	2.055	2.365	2.34	2.34	-	2.34	-	1.8	-	2.05
	C406 L2	2.63	1.1	0.9		0.87							0.93
	C407	3	3	3	2.4	2.6	1.6	1.4	1.6	1.6	1.6	2	2
	C408	2	2	2.25	-	1.25	-	-	1	2	2	1	1.5
S8	C409	2.5	2.5	1.98	2.335	2	2.13	1.75	2.015	2.5	-	-	1.84
	C410	2.975	2.81	2.315	1.985	1.975	1.975	2	0.99	1.815	0.99	-	0.99
	C411 L5	1.5	1.5	1.5	1	1.33	1	-	1	1	1	1	1
	C412 L32	2.665	2.05	2.35	1.88	2.015	2	1.75	2	-	-	1.875	2.5
	C412 L36	1.5	2	1.5	1.5	1.75	1.75	1.5	2	2	1.665	1.5	1.75
	C412 L13	2	2	2	2	2	2	2	2	2	2	2	2
	C413	3	3	3	2.25	2.5	2	1.75	1.8	2.2	2	1.8	1.8
Direct Attainment		2.28	2.04	1.95	1.77	1.76	1.59	1.56	1.67	1.77	1.74	1.68	1.7
Indirect Attainment		2.41	2.33	2.26	2.08	2.19	2.2	2.25	2.32	2.29	2.31	2.16	2.39



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HEAD, COMPUTER SCIENCE & ENGG DEPT.

Viswajyothi College Of Engg. & Tech.

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Tools	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
70% of Direct Attainment	1.6	1.43	1.37	1.24	1.23	1.11	1.09	1.17	1.24	1.22	1.18	1.19
30% of Indirect Attainment	0.72	0.7	0.68	0.62	0.66	0.66	0.68	0.7	0.69	0.69	0.65	0.72
Total Attainment	2.32	2.13	2.05	1.86	1.89	1.77	1.77	1.87	1.93	1.91	1.83	1.91



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

BATCH 2016-2020

CO ATTAINMENT

Semester	Course	CO1	CO2	CO3	CO4	CO5	CO6	CO attainment
S1	C101	3	3	2.8	2.8	3	3	2.93
	C103	3	3	3	3	3	3	3
	C104	1.74	1.75	1.75	1.74	1.65	1.8	1.74
	C109	2.4	2.93	2.9	3	3	3	2.87
	C111	3	3	3	3	3	3	3
	C113	2.97	2.9	3	3	2.4	3	2.88
	C117	2.5	3	3	3	3	3	2.92
	C119	3	3	3	3	3	-	3
	C121	3	3	3	3	3	3	3
S2	C102	3	2.93	3	3	3	3	2.99
	C105	3	3	3	3	3	3	3
	C112	3	2.9	3	3	3	2.7	2.93
	C114	3	3	2.6	3	2.4	2.4	2.73
	C116	3	3	3	3	3	3	3
	C118	3	3	3	3	3	-	3
	C120	3	3	3	3	-	-	3
	C123	3	3	3	3	3	3	3
	C124	3	3	3	2.8	3	-	2.96
S3	C201	2	2.2	1.9	2.15	2.2	2.1	2.09
	C202	1.735	1.7	1.8	1.75	1.7	1.8	1.75
	C203	1.7	1.8	1.8	1.8	1.8	1.75	1.78
	C204	2.55	2.3	2.3	2.6	2.6	2.3	2.44
	C205	2.2	2.2	2.2	2	2	2.2	2.13
	C206	3	2.1	3	3	3	2.1	2.7
	C207	2.75	2.75	2.75	2.75	2.75	-	2.75
	C208	2.75	2.75	2.75	2.75	2.75	-	2.75
S4	C209	3	3	3	3	2.4	3	2.9
	C210	2.45	2.5	2.25	2.3	1.85	2.5	2.31
	C211	3	3	2.7	2.8	2.965	3	2.91
	C212	3	2.9	2.9	2.9	2.7	3	2.9
	C213	3	3	2.7	3	3	3	2.95
	C214	1.35	1.2	1	1.4	1.4	1.4	1.29



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	C216	3	3	3	3	3	-	3
S5	C301	2.925	2.925	2.55	2.7	3	2.55	2.78
	C302	2.45	1.75	1.75	2.05	2.2	1.75	1.99
	C303	3	2.55	3	3	3	-	2.91
	C304	3	2.45	3	3	3	3	2.91
	C305	3	3	3	3	2.8	3	2.97
	C306	2.35	2.95	2.965	2.25	3	3	2.75
	C307	3	3	-	-	-	-	3
	C308	3	3	3	3	3	-	3
	C309	3	3	3	3	3	-	3
S6	C310	2.175	1.95	2.05	1.8	2.25	1.95	2.03
	C311	2.55	2.85	3	2.55	2.625	-	2.72
	C312	2.2	2.65	2.35	2.05	2.575	2.65	2.41
	C313	2.3	2.3	2.3	1.4	2	-	2.06
	C314	1.7	2.3	1.7	1.4	1.4	2.3	1.8
	C315 L3	1.4	2.2	1.7	1.4	2.3	-	1.8
	C315 L5	2.925	3	2.85	2.85	3	-	2.93
	C316	2.5	2.5	2.5	2.5	2.5	-	2.5
	C317	3	3	3	3	3	-	3
S7	C318	0.825	-	-	-	-	-	0.83
	C401	2.7	3	3	3	2.1	-	2.76
	C402	3	3	3	3	3	3	3
	C403	3	2.925	3	2.55	3	3	2.91
	C404	3	2.775	3	3	3	2.55	2.89
	C405	2.55	2.925	2.925	2.55	2.1	2.1	2.53
	C406L1	3	2.7	3	3	2.7	3	2.9
	C406L3	1.3	1.3	1.6	1.3	0.7	-	1.24
	C407	3	3	3	3	3	-	3
S8	C408	3	3	3	3	3	-	3
	C409	3	3	2.85	3	3	2.7	2.93
	C410	3	3	3	3	3	3	3
	C411L4	3	3	3	3	3	3	3
	C412L40	3	3	3	3	-	-	3
	C412L11	3	3	3	3	3	3	3
	C412L15	2.85	3	3	3	3	3	2.98
	C412L29	3	3	3	3	3	3	3
	C413	3	3	3	3	3	-	3

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HEAD, ELECTRONICS & COMM. ENGG. DEPT.
VISWAJYOTHI COLLEGE OF ENGG. & TECHNOLOGY
VAZHAKULAM P.O., MUVATTUPUZHA



PO ATTAINMENT

Semester	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
S1	C101	2.44	2.11	2.29	1.96	-	1.47	-	1.96	1.93	-	-	1.8
	C103	1.94	1.97 5	1.90 5	2	1.91	1.90 5	-	2	-	-	-	1.925
	C104	1.73 5	1.25	1.54 5	1.35	0.86	-	0.58	-	1.73 5	-	0.725	1.735
	C109	1.91 5	1.75	1.78	0.98 5	1.78	1.91 5	1.12 5	-	0.95 5	-	1.125	1.915
	C111	1	-	1	-	2	1.5	3	2	2	1	-	1.17
	C113	1.91 5	1.45 5	1.61 5	0.96	2	1.91 5	0.95	0.98 5	0.99 5	-	-	1.915
	C117	1.94 5	0.83 5	1.89	-	2	1.93 5	0.94 5	0.96 5	1.93 5	0.97	0.835	1.665
	C119	3	2	-	-	-	-	-	2	2	-	-	2
	C121	1.67	1.5	1	-	1.83	1	1	1	1	2	1	2
S2	C102	1.83	1	1	1	1	1	-	-	-	-	-	1
	C105	3	3	2	2	2	-	1	2	-	2	-	1
	C112	1.80 5	2.38	1	1.99	1	1.95 5	1.9	1.95 5	1.63 5	1.585	1	2.455
	C114	2.4	2.43	1.82	1.82	0.91	1.12	1	-	-	1	-	0.91
	C116	2	2	1.2	1	1	-	1	1	2	1	1	1
	C118	2	1.8	1.5	-	-	2	2	2	2	1	1	1
	C120	3	1.75	1.5	1	1	1.5	-	1	2	1	-	2
	C123	3	3	2	1	1	1	-	-	1	-	-	1.67
	C124	2.96	2.96	3	3	3	2.46 5	2.56	2.75	2.33	2.33	2.265	2.56
S3	C201	1.75	1.51 5	1.62 5	1.39	-	1.05	-	1.41	1.37 5	-	-	1.28
	C202	1.75	1.64 5	1.06 5	0.97	0.58 5	0.58	-	-	0.58	-	-	1.065
	C203	1.75	1.58	1.34 5	1.18		0.81 5	-	-	0.97 8	-	-	1.173
	C204	2.44	2.02 5	2.02 5	1.85 5	0.82 5	-	-	-	0.81 5	-	-	-
	C205	1.16	1.16	1.14	1.03 5	0.68 5	1.16	-	-	1.16	-	-	1.16
	C206	-	1	-	-	-	1	-	1.23	1.6	1.88	-	1.48
	C207	2.75	2.38 5	2.56 5	2.75	1.28 5	0.91 5	0.91 5	0.91 5	0.91 5	1.835	-	1.1
	C208	2.38 5	1.65	1.65	0.91 5	1.83 5	0.91 5		0.91 5	1.83 5	0.915	-	0.915
S4	C209	2.56 8	2.01 8	2.10 8	1.83 3	1.56	0.91 5	-	-	1.37 5	-	-	1.008
	C210	2.47 6	1.83 4	1.87 9	1.37 4	1.69 8	0.91 5	-	-	1.60 5	-	-	0.961
	C211	2.52 2	1.92 6	1.99 3	1.60 3		0.91 5	-	-	1.49	-	-	0.984



	C212	1.93	1.765	1.93	1.93	0.97	1.2	-	0.97	0.97	0.97	-	1.93
	C213	1.8	1.8	1.46 5	0.97 5	1.96 5	1.9	-	1	0.98	-	0.985	1.965
	C214	-	0.8	1.4	0.8	-	-	-	0.78	-	-	0.93	0.9
	C215	2.4	2.21 5	1.6	1.6	0.8	0.8	-	-	1.6	-	-	0.8
	C216	2.2	2	2.4	1.2	1	-	-	-	2	-	-	2
S5	C301	2.775	2.775	2.605	2.605	1.995	0.925	-	-	0.925	-	0.875	1.85
	C302	1.99	0.66	1.33	0.88 5	0.73 5	0.82	0.58 5	-	0.66	-	-	1.33
	C303	2.71	2.11	1.74	0.97	0.97	0.95	1.61 5	0.95	1.54	-	0.95	1.94
	C304	2.41 5	2.33	1.75	1.35 5	0.97	1.29 5	-	0.95	0.97	-	-	1.755
	C305	2.96 5	-	-	-	-	-	-	2.8	2.48	2.145	2.145	2.8
	C306	1.83 5	2.16 5	1.83 5	1.83 5	1.65	2.25 5	-	0.92	0.92	1.835	-	0.92
	C307	3	3	3	3	3	3	3	-	2	-	6	-
	C308	3	2.25	2	1.25	2	1	-	1	2	1	2	2
	C309	2.8	2.6	1.75	1.75	1	1	-	-	2	-	-	1
S6	C310	2.02 5	1.91 5	1.84 5	1.75	1.62	1.91	-	-	0.67 5	-	-	0.675
	C311	2.35 5	2.18	1.47 5	1.27 5	1.81 5	0.90 5	-	-	0.90 5	-	-	1.81
	C312	2.07 5	1.18 5	1.18 5	1.06 5	1.27	0.80 5	0.79 5	0.8	0.80 5	-	-	0.805
	C313	1.91	1.24	1.24	0.63 5	0.66 5	1.53	0.89	0.77	0.77	0.77	1.53	1.53
	C314	1.24	1.065	1.065	1.065	0.62	0.98	0.77	0.62	0.62	0.62		0.62
	C315 L3	1.56	1.62	1.3	-	0.93	-	-	-	-	-	-	1.14
	C315 L5	2.92 5	2.15 5	2.15 5	1.96 5	0.97 5	0.97 5	-	-	0.97 5	-	-	1.95
	C316	2.5	2	2	1.33 5	1.66 5	0.83 5	-	-	0.83 5	-	-	0.835
	C317	3	2	2	2.25	1	1	-	2	2	-	-	2
	C318	0.55	0.55	-	-	-	-	-	-	0.27 5	0.55	-	0.55
S7	C401	2.76	1.64	1.42	0.9	0.92	0.92	-	-	0.92	-	-	2.76
	C402	2	2.5	2.67	2		1	1.33	-	-	-	-	-
	C403	2.1	1.93	2.43	0.8	1.47	2	-	-	0.97	-	-	0.97
	C404	2.88 5	2.88 5	2.26	1	-	-	-	-	0.96	-	-	1.925
	C405	2.52 5	2.52 5	2.29 5	1.68 5	0.84	0.84		0.84	0.84	-	-	3.37
	C406L1	2.1	1.45	1.7	1.45	-	0.97	0.97	1	-	-	-	0.97
	C406L3	1.12	0.67	0.96	-	-	0.47	0.53	-	-	-	-	-
	C407	3	3	3	2.4	2.6	1.6	1.4	1.6	1.6	1.6	2	2
	C408	2.4	2.4	2	1.4	1.5	1	-	1	1.8	2	-	2
S8	C409	2.925	1.64	1.785	1.3	1.475	0.97	-	-	1	-	-	0.975
	C410	3	2.33	1.5	1.17	1.33	1	-	-	-	-	-	1



VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

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Vazhakulam P.O., Muvattupuzha-686 670, Kerala

Tel: 0485 2262211, 2262255, 9496335522

Email: vjcet@vjcet.org, www.vjcet.ac.in

Established in 2001

Managed by Catholic Diocese Kothamangalam



C411L4	3	2.83	1.67	2		1.33	-	3	1	-	-	2
C412L4 0	1	2	1	1	1.5	1.5	1	2	2	1.33	1	1.5
C412L1 1	3	-	-	-	1	2	2	-	-	-	3	3
C412L1 5	2.97 5	-	-	-	-	-	2.97 5	-	-	-	-	2.975
C412L2 9	2.67	2	3	2	2	2	2	1.5	2	2	-	4
C413	3	3	3	2.25	2.5	2	1.75	1.8	2.2	2	1.8	1.8
Direct Attainment	2.29	1.93	1.8	1.51	1.42	1.3	1.41	1.42	1.37	1.41	1.61	1.59
Indirect Attainment	2.5	2.4	2.38	2.01	2.16	2.13	2.13	2.45	2.37	2.47	2.27	2.31
Total Attainment	2.33	2.02	1.92	1.61	1.57	1.47	1.55	1.63	1.57	1.62	1.74	1.73

70% of Direct Attainment	1.6	1.35	1.26	1.06	0.99	0.91	0.99	0.99	0.96	0.99	1.13	1.11
30% of Indirect Attainment	0.75	0.72	0.71	0.6	0.65	0.64	0.64	0.74	0.71	0.74	0.68	0.69
Total Attainment	2.35	2.07	1.97	1.66	1.64	1.55	1.63	1.73	1.67	1.73	1.81	1.8


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HEAD, ELECTRONICS & COMM. ENGG. DEPT.
VISWAJYOTHI COLLEGE OF ENGG. & TECHNOLOGY
VAZHAKULAM P.O., MUVATTUPUZZHA



**DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING**

BATCH: 2016-2020

CO ATTAINMENT

Semester	Course Code	CO1	CO2	CO3	CO4	CO5	CO6	CO Attainment
S1	C101	2.15	2.15	2.10	2.15	2.15	2.15	2.58
	C102	3.00	2.98	3.00	3.00	3.00	3.00	3.00
	C105	2.20	2.20	2.00	2.20	2.20	2.20	2.17
	C108	2.90	2.90	2.90	3.00	2.40	2.70	2.80
	C112	3.00	2.97	3.00	3.00	3.00	3.00	3.00
	C116	2.88	2.95	2.84	3.00	2.70	2.95	2.89
	C119	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	C123	3.00	3.00	3.00	3.00	-	-	3.00
S2	C124	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	C103	2.90	2.87	2.70	2.90	3.00	3.00	2.90
	C104	3.00	2.90	3.00	2.90	2.90	3.00	2.95
	C113	3.00	3.00	3.00	3.00	3.00	2.70	2.95
	C114	1.90	2.20	2.10	2.10	1.90	2.20	2.07
	C117	3.00	2.90	3.00	3.00	3.00	3.00	2.99
	C118	2.70	2.70	2.70	2.50	2.70	-	2.66
	C120	2.75	2.75	3.00	3.00	3.00	3.00	2.92
S3	C121	3.00	3.00	3.00	3.00	3.00	-	3.00
	C122	3.00	3.00	3.00	3.00	3.00	-	3.00
	C201	1.30	0.80	0.80	1.20	1.20	1.40	1.12
	C202	1.80	1.80	1.60	1.30	1.75	-	1.65
	C203	2.50	2.30	2.10	2.60	2.40	2.00	2.32
	C204	1.70	1.50	1.50	1.80	1.70	1.20	1.57
	C205	2.20	2.15	2.20	1.90	1.60	1.60	1.94
	C206	3.00	2.80	3.00	3.00	3.00	2.80	2.94
S4	C207	3.00	3.00	3.00	3.00	-	-	3.00
	C208	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	C209	3.00	2.80	3.00	3.00	3.00	2.80	2.94
	C210	0.80	0.97	0.40	0.80	1.00	0.70	0.78
	C211	3.00	2.80	3.00	3.00	3.00	-	2.96
	C212	3.00	2.70	2.60	2.60	3.00	3.00	2.82
	C213	2.70	2.94	2.70	2.80	2.80	2.80	2.79
	C214	3.00	3.00	3.00	3.00	3.00	-	3.00
	C215	3.00	3.00	3.00	3.00	-	-	3.00
	C216	2.75	2.75	2.75	2.75	2.75	2.75	2.75
	C301	2.60	2.30	2.60	2.60	2.30	-	2.48
	C302	2.50	2.60	2.60	2.60	2.60	-	2.58

Dr. B. ARUNA



VISWAJYOTHI

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S5	C303	2.00	1.80	2.20	2.20	-	-	2.03
	C304	1.77	1.40	1.50	1.65	1.80	1.75	1.65
	C305	3.00	2.60	2.60	3.00	3.00	2.80	2.83
	C306-04	3.00	3.00	3.00	3.00	2.80	2.40	2.87
	C306-07	2.87	2.65	2.60	2.40	2.40	3.00	2.65
	C307	3.00	3.00	3.00	-	-	-	3.00
	C308	3.00	3.00	3.00	-	-	-	3.00
	C309	3.00	2.50	2.50	2.50	3.00	-	2.70
S6	C310	3.00	2.40	2.90	2.40	2.40	-	2.62
	C311	2.54	2.50	2.37	2.25	2.50	-	2.43
	C312	2.90	2.25	2.55	2.25	2.80	-	2.50
	C313	2.80	3.00	3.00	2.40	2.40	3.00	2.77
	C314	2.85	2.85	3.00	3.00	3.00	3.00	2.95
	C315-03	2.55	2.60	2.60	2.60	2.55		2.58
	C315-05	3.00	3.00	3.00	2.60	3.00	3.00	2.94
	C316	2.00	2.00	2.00	2.00	-	-	2.00
	C317	2.75	2.75	2.50	2.50	-	-	2.63
	C318	3.00	-	-	-	-	-	3.00
S7	C401	2.55	2.65	2.05	1.75	2.65		2.33
	C402	2.10	2.10	2.10	2.10	2.10	2.10	2.10
	C403	3.00	3.00	3.00	3.00	2.10	3.00	2.84
	C404	2.60	2.00	2.40	2.00	2.00	2.60	2.27
	C405	3.00	3.00	2.95	3.00	2.55	3.00	2.84
	C406-05	2.80	2.90	2.95	2.40	2.40	-	2.69
	C407	3.00	3.00	3.00	3.00	3.00	-	3.00
	C408	3.00	3.00	3.00	3.00	-	-	3.00
S8	C409	3.00	3.00	3.00	3.00	3.00	2.10	2.85
	C410	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	C411-04	3.00	2.95	3.00	3.00	2.40	-	2.86
	C411-06	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	C412-01	2.10	2.10	2.10	2.10	2.10	2.10	2.10
	C412-02	3.00	3.00	3.00	3.00	2.10	-	2.82
	C412-03	2.85	2.85	3.00	3.00	3.00	3.00	2.95
	C412-04	3.00	2.10	3.00	3.00	3.00	3.00	2.87
	C413	3.00	3.00	3.00	3.00	-	-	3.00



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PO ATTAINMENT

Semester	Course Code	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
S1	C101	2.16	1.87	2.01	1.73	-	1.29	-	1.74	1.72	-	-	1.59
	C102	1.83	1.00	1.00	1.00	1.00	1.00	-	-	-	-	-	1.00
	C105	2.17	2.17	1.45	1.45	1.47	-	0.72	1.45	-	1.45	-	0.72
	C108	2.34	1.70	1.42	1.10	0.94	0.89	-	-	-	-	-	0.94
	C112	0.99	-	1.00	-	2.00	1.50	3.00	2.00	2.00	1.00	-	1.17
	C116	1.93	1.45	1.61	0.97	1.45	1.93	1.13	-	0.97	-	1.13	1.93
	C119	2.00	2.00	1.20	1.00	1.00	-	1.00	1.00	2.00	1.00	1.00	1.00
	C123	3.00	1.75	1.50	1.00	1.00	1.50	-	1.00	2.00	1.00	-	2.00
	C124	1.67	1.25	1.00	-	1.83	1.00	1.00	1.00	1.00	2.00	1.00	2.00
S2	C103	1.93	1.91	1.89	1.80	1.90	1.96	-	2.00	-	-	-	1.96
	C104	2.95	2.13	2.62	2.30	1.47	-	0.99	-	2.95	-	1.23	2.95
	C113	1.82	2.40	1.00	2.00	1.00	1.97	1.90	1.97	1.65	1.60	1.00	2.47
	C114	1.32	1.05	1.15	0.69	1.47	1.38	0.69	0.69	0.68	-	-	1.38
	C117	2.99	2.99	1.99	1.00	1.00	0.99	-	-	1.00	-	-	1.67
	C118	2.66	2.66	2.70	2.70	2.70	2.22	2.30	2.48	2.10	2.10	2.04	2.30
	C120	1.95	0.92	1.89	-	2.00	1.94	-	0.99	1.94	0.97	0.92	1.84
	C121	2.00	1.80	1.50	-	-	2.00	2.00	2.00	2.00	1.00	1.00	1.00
	C122	3.00	2.00	-	-	-	-	-	2.00	2.00	-	-	2.00
S3	C201	1.12	1.12	0.74	0.66	0.47	0.43	-	-	0.37	0.80	-	0.77
	C202	1.57	1.45	1.03	0.91	1.02	0.56	-	-	-	-	-	1.74
	C203	1.72	1.80	2.08	1.55	1.02	-	-	-	-	1.47	0.74	1.18
	C204	1.57	1.04	1.04	-	-	0.71	1.23	-	-	0.52	0.52	1.04
	C205	1.39	0.74	1.07	0.53	1.39	-	-	-	-	-	1.07	1.30
	C206	-	1.87	3.00	1.87	-	-	-	2.00	-	-	1.96	2.00
	C207	3.00	3.00	3.00	2.50	2.00	1.50	-	-	1.33	-	2.00	2.00
	C208	1.84	0.90	0.90	-	2.75	-	-	1.80	2.75	1.84	-	2.75
	C209	2.67	2.45	2.03	1.87	1.45	1.32	-	-	1.00	-	-	2.27
S4	C210	0.39	0.78	0.76	0.66	0.33	-	-	-	-	0.80	0.40	0.41
	C211	2.05	1.47	1.46	1.45	2.50	0.98	0.97	-	0.98	-	-	2.04
	C212	1.11	0.94	0.94	0.94	3.00	0.94	0.94	-	0.94	-	-	2.05
	C213	2.63	2.47	2.75	2.29	1.39	1.87	-	-	1.80	1.88	-	2.55
	C214	-	1.00	-	-	-	1.00	-	1.33	1.75	2.00	-	1.60
	C215	2.67	2.25	2.33	2.33	1.00	2.00	1.00	1.00	1.67	2.00	1.00	2.00
	C216	1.84	1.38	0.92	1.10	0.92	0.92	-	1.84	0.92	-	-	-
	C301	2.48	2.48	2.31	1.54	0.77	-	-	-	-	2.60	1.74	1.31
	C302	1.89	2.58	1.94	1.72	1.50	-	-	-	-	-	-	0.86
	C303	1.38	1.38	1.38	1.55	1.55	0.68	1.37	-	0.68	1.37	-	2.05

Dr. B. ARUNA

3



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S5	C304	1.30	0.90	0.75	0.55	0.55	-	-	-	-	-	-	0.90
	C305	1.10	0.94	0.94	0.94	2.90	0.94	0.94	-	1.44	-	-	2.56
	C306-04	2.57	2.87	2.16	2.40	2.80	-	1.80	-	-	2.70	-	1.90
	C306-07	2.65	1.32	1.94	2.07	1.00	1.25	0.92	0.90	1.00	1.14	-	1.77
	C307	3.00	3.00	3.00	3.00	2.67	2.00	2.00	2.00	2.67	2.67	3.00	2.67
	C308	3.00	-	3.00	2.00	2.00	-	2.00	-	3.00	-	-	3.00
	C309	2.30	1.90	1.95	1.75	0.84	0.90	1.00	2.00	1.30	2.00	1.00	1.80
S6	C310	2.62	2.62	2.30	2.30	1.43	1.08	0.80	-	-	1.50	-	1.59
	C311	2.43	1.95	1.79	-	1.69	-	-	-	-	-	-	0.81
	C312	2.25	2.50	1.77	2.30	2.50	-	1.50	-	-	2.85	-	1.65
	C313	2.77	2.60	1.68	1.84	1.60	1.90	1.90	1.00	-	-	-	1.84
	C314	2.95	-	-	-	-	-	2.79	2.46	2.13	2.13	2.13	2.78
	C315-03	2.58	2.58	2.41	1.72	0.87	-	-	-	-	2.55	1.72	1.38
	C315-05	2.94	0.98	0.98	-	1.38	1.95	-	0.98	-	-	-	1.38
	C316	2.00	1.33	0.67	0.67	1.33	0.67	0.67	1.33	0.67	0.67	0.67	0.67
	C317	2.21	1.73	1.17	1.78	1.75	0.88	0.88	-	1.75	0.88	0.89	0.88
	C318	3.00	-	-	-	-	-	-	-	3.00	3.00	-	3.00
S7	C401	2.33	1.62	0.96	1.70	-	0.87	1.17	-	-	-	1.13	1.44
	C402	1.28	1.52	2.10	1.40	1.40	2.10	2.10	-	-	-	-	1.87
	C403	2.84	2.27	1.88	2.37	2.81	2.84	1.90	2.84	2.84	2.84	-	1.90
	C404	1.87	1.61	1.90	1.66	1.77	-	-	-	-	-	-	1.05
	C405	2.84	2.84	1.89	1.78	1.18	1.00	1.00	0.95	-	-	-	0.95
	C406-05	2.50	2.34	2.43	2.77	2.41	1.81	1.96	-	2.69	2.69	-	2.69
	C407	3.00	2.00	1.50	2.50	1.00	2.67	-	2.00	2.33	2.00	2.00	1.33
	C408	3.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
S8	C409	2.85	2.85	1.90	0.95	0.95	0.95	0.95	0.95	-	-	-	0.95
	C410	3.00	2.00	2.00	1.00	3.00	-	2.00	-	-	-	-	3.00
	C411-04	1.99	-	0.80	0.80	1.99	1.97	-	-	-	1.60	-	0.80
	C411-06	3.00	2.00	2.00	1.00	3.00	-	2.00	-	-	-	-	3.00
	C412-01	3.00	3.00	3.00	3.00	3.00	2.40	1.40	1.05	1.40	1.40	-	1.40
	C412-02	0.94	-	-	-	-	2.82	1.88	2.82	-	-	-	1.48
	C412-03	2.95	-	-	-	1.00	2.00	2.00	-	-	-	3.00	2.95
	C412-04	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
	C413	3.00	2.33	2.25	3.00	3.00	2.00	2.00	2.50	2.50	2.25	2.50	3.00
DIRECT ATTAINMENT		2.23	1.87	1.70	1.62	1.65	1.48	1.47	1.64	1.70	1.71	1.42	1.73

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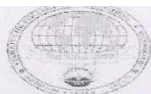


Overall PO Attainment

Tools	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
Direct Attainment	2.23	1.87	1.70	1.62	1.65	1.48	1.47	1.64	1.70	1.71	1.42	1.73
Indirect Attainment	2.30	2.15	2.14	2.00	2.12	2.15	2.20	2.30	2.31	2.15	2.18	2.25
70% Direct Attainment	1.56	1.31	1.19	1.13	1.16	1.03	1.03	1.15	1.19	1.20	0.99	1.21
30% Indirect Attainment	0.69	0.64	0.64	0.60	0.64	0.65	0.66	0.69	0.69	0.65	0.65	0.68
Overall Attainment	2.25	1.95	1.83	1.73	1.79	1.68	1.69	1.84	1.88	1.85	1.65	1.89

DR. B. ARUNA

Prof. & Head of Electrical & Electronics Dept.
Viswajyothi College of Engg. & Technology
Vazhakulam, Muvattupuzha, - 686 670

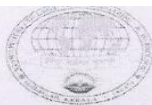


VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM P.O.,
MUVATTUPUZHA, ERNAKULAM – 686670
DEPARTMENT OF INFORMATION TECHNOLOGY (2016-2020 batch)

CO ATTAINMENT

Semester	Course	C01	C02	C03	C04	C05	C06	Cours Attain ment
S1	C101	3	3	3	2.4	3	3	2.9
	C102	3	3	3	3	3	3	3
	C103	2.9	2.9	2.8	2.4	3	3	2.83
	C104	2.9	2.8	3	3	3	3	2.95
	C105	2.4	3	2.4	3	3	2.4	2.7
	C110	2.2	1.6	2.2	2.2	1.6	1.6	1.9
	C112	3	2.9	3	3	3	3	2.98
	C115	2.2	2.2	1.6	2.2	1.6	1.6	1.9
	C116	2.4	3	3	3	2.4	2.4	2.7
S2	C117	2.9	3	2.6	3	3	3	2.92
	C118	3	3	3	3	3		3
	C119	3	1	3	-	3	3	2.6
	C120	2.5	3	3	3	3	3	2.92
	C123	3	3	3	3	-	-	3
	C124	3	3	3	3	3	-	3
	C125	3	3	3	3	3	3	3
	C127	3	2.8	2.8	3	2.8	-	2.88
	C128	3	3	3	3	-	-	3

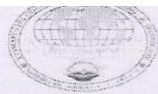
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DEPARTMENT OF INFORMATION TECHNOLOGY (2016-2020 batch)

S3	C201	2	2.2	2	2.2	2.2	2	2.1
	C202	2.2	2.2	2.2	2	1.6	1.6	1.97
	C203	2.1	1.8	2.2	2.2	1.8	2.2	2.05
	C204	2.8	2.8	3	3	3	3	2.93
	C205	2.8	3	3	3	3	2.8	2.93
	C206	3	2.1	3	3	3	2.1	2.7
	C207	3	3	3	3	3	3	3
	C208	3	3	3	3	3		3
S4	C209	3	2.4	3	2.8	3	3	2.87
	C210	2.9	3	3	2.4	2.4	3	2.78
	C211	3	3	2.87	2.4	2.4	3	2.78
	C212	3	2.8	3	3	3	3	2.97
	C213	0.5	0.6	0.2	0.6	0.6	0.6	0.52
	C214	0.6	0.2	0.2	0.6	0.6	0.6	0.47
	C215	3	3	3	3	3	3	3
	C216	3	3	3	3	3	3	3
S5	C301	3	2.4	2.8	3	2.4	3	2.77
	C302	2.1	3	3	3	3	3	2.85
	C303	3	2.1	3	2.4	3	2.4	2.65
	C304	2.9	3	3	3	3	3	2.98
	C305	3	2.7	3	2.85	3	2.4	2.83
	C306L04	3	3	3	2.8	2.4	3	2.87
	C307	3	3	3				3
	C308	3	3	3	3	3	3	3
	C309	3	3	3	3	3	3	3

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DEPARTMENT OF INFORMATION TECHNOLOGY(2016-2020 batch)

S6	C310	2.92	3	3	3	2.1	3	2.84
	C311	3	3	3	3	2.8	2.4	2.87
	C312	3	3	3	3	3	3	3
	C313	3	3	3	3	3	3	3
	C314	3	2.9	3	3	2.6	3	2.92
	C315L03	3	2.4	2.4	3	3	3	2.8
	C316	3	3	3	3	3		3
	C317	3	3	3	3	3	3	3
	C318	3						3
S7	C401	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	C402	2.7	3	3	3	3	3	2.95
	C403	2.8	2.8	2.8	3	3		2.88
	C404	3	3	2.7	3	2.1	3	2.8
	C405	2.7	2.85	2.7	3	3	3	2.88
	C406L03	3	3	3	3	3	3	3
	C406L04	3	2.4	2.8	2.4	3		2.72
	C407	3	3	3	3	3		3
	C408	3	3	3	3	3	3	3
S8	C 409	3	2.1	2.1	3	2.1	3	2.55
	C 410	3	3	3	3	3	3	3
	C 411L02	3	3	3	3	3	3	3
	C 411L03	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	C412	3	3	2.7	3	3	3	2.95
	C413	3	2.4	3	3	3	3	2.9
	C414	3	3	2.1	3	3	3	2.85
	C 415	3	3	-	-	-	-	3
AVG		2.69	2.59	2.65	2.68	2.61	2.63	2.64

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VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM P.O.,
MUVATTUPUZHA, ERNAKULAM – 686670
DEPARTMENT OF INFORMATION TECHNOLOGY(2016-2020 batch)

PO ATTAINMENT

Program	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
S1	C101	2.4	2.07	2.27	1.93	-	1.43	-	1.87	1.9	-	-	1.77
	C102	1.83	1	1	1	1	1	-	-	-	-	-	1
	C103	1.89	1.93	1.8	1.87	1.83	1.84	-	2	-	-	-	1.89
	C104	2.95	2.12	2.63	2.28	1.49	-	0.98	-	2.95	-	1.25	2.95
	C105	2.7	2.7	1.8	1.8	2	-	0.9	1.8	-	1.8	-	0.9
	C110	1.48	1.63	1.63	1.33	1.02	0.95	-	-	1.14	-	1.23	1.02
	C112	0.97	-	1	-	2	1.49	2.98	1.99	1.99	0.98	-	1.16
	C115	1.66	1.69	1.27	1.27	0.63	0.77	0.73	-	-	0.73	-	0.63
	C116	1.8	1.37	1.6	1	1.4	1.8	1.07	-	0.9	-	1.07	1.8
	C117	2.92	2.92	1.94	0.97	0.87	0.94	-	-	0.99	-	-	1.62
S2	C118	3	3	3	3	3	2.5	2.6	2.75	2.33	2.33	2.33	2.6
	C119	1.44	2	0.67	1	0.67	-	0	0.72	1.44	0.5	1	0.67
	C120	1.94	0.83	1.89	-	2	1.93	0.94	0.97	1.93	0.97	0.83	1.67
	C123	3	1.75	1.5	1	1	1.5	-	1	2	1	-	2
	C124	1.5	1	1	-	1.5	1	1	0.83	0.83	1.67	1	1.67
	C125	2.83	2.67	2.67	3	2	1	-	1.8	2	-	2	1.2
	C127	2.31	2.31	1.92	1.91	2.5	-	-	-	0.96	-	1.47	1.91
	C128	2.25	2.5	2.5	2	3	-	-	2	2	2	2	2

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VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM P.O.,
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DEPARTMENT OF INFORMATION TECHNOLOGY(2016-2020 batch)

S5	C301	1.22	2.3	2.47	1.9	2.13	-	2	-	-	-	-	-
	C302	2.42	2.52	2.08	2.07	-	-	-	-	-	-	-	1.88
	C303	0.9	1.25	2.05	1.35	1.27	-	-	-	-	0.9	-	-
	C304	1.32	1.66	1.83	1.2	1	1	-	1	0.98	-	-	1.39
	C305	2.66	2.02	2.37	1.88	2.05	1.9	2	1.83	-	-	1.98	2.49
	C306	2.7	2.08	2.37	1.91	2.08	1.87	2	1.82	-	-	1.87	2.57
	C307	2	2	3	1.5	1.5	-	-	1	1	-	-	1.33
	C308	2	2.33	2	2	2.2	2	-	2	2	-	3	2
S6	C309	2.8	2.2	1.8	1.6	2	2	-	2	3	1	-	3
	C310	2.22	2	2	-	1.95	-	-	-	-	-	-	1.77
	C311	2.06	2.22	1.51	1.92	2.33	-	-	-	-	-	-	2.6
	C312	2.17	2.17	2.5	2	2	1.5	-	-	-	-	-	3
	C313	1.5	2.5	2.4	2	-	-	-	-	-	-	-	2
	C314	2.92	-	-	-	-	-	-	2.76	2.44	2.11	2.11	2.75
	C315	2.3	2.13	1.57	1.7	1.16	-	-	-	-	-	-	1.84
	C316	2.4	1.8	2	1.5	-	-	-	-	-	-	-	-
	C317	2	2.33	2	2	2.2	2	-	2	2	-	3	2
	C318	3	-	-	-	-	-	-	-	3	3	-	3

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DEPARTMENT OF INFORMATION TECHNOLOGY(2016-2020 batch)

S7	C401	1.66	1.72	1.28	1.53	1.79	-	-	-	-	-	-	2.11
	C402	2.8	2.13	2.47	1.97	2.13	2	1.9	2	-	-	1.95	2.63
	C403	1.8	1.6	1.6	-	-	0.8	-	-	-	0.8	1.28	1.33
	C404	1.97	2.35	2.42	2.68	1.74	1.93	2	1	2.5	2	2	1.58
	C405	2.72	2.08	2.4	1.92	2.07	2	1.8	2	-	-	1.9	2.56
	C406	1.11	0.9	1.22	1.18	1.6	1.24	0.93	2	1.77	1.77	1.82	-
	L03												
	C406	3	3	3	1.5	-	1	-	-	1	-	-	1.5
	L04												
	C407	2.8	2.33	2.5	2.25	2	2.5	2	2	2.2	3	2	2.5
S8	C408	2	2.33	2	2	2.2	2	-	2	2	-	3	2
	C409	2.13	1.84	1.95	2.03	2.1	2.37	-	2.37	-	1.8	-	1.8
	C410	3	3	3	1.5	-	1	-	-	1	-	-	1.25
	C411	2.33	2	2.33	2.5	2.33	2	2	2.67	-	-	2	2.83
	L04												
	C411	1.98	1.52	1.75	1.4	1.52	1.4	1.4	1.4	-	-	1.4	1.87
	L04												
	C412	2	2	3	2	1	-	-	1	1	-	-	1.5
	C41	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93

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DEPARTMENT OF INFORMATION TECHNOLOGY(2016-2020 batch)

	C414	2.62	2	2.85	2	1.93	2	2	1.45	1.9	1.9	-	1.95
	C415	1	1.23	1.45	1.5	-	1.62	-	-	1.7	1.4	-	1.2
AVG		2.05	1.94	1.94	1.68	1.62	1.5	1.4	1.64	1.59	1.49	1.83	1.8
RECT 70%		1.44	1.36	1.36	1.17	1.14	1.08	1.04	1.15	1.11	1.04	1.28	1.29
INDIRECT		1.99	1.88	1.83	1.62	2.38	2.49	2.49	2.65	2.54	2.67	2.47	2.36
DIRECT 30%		0.60	0.56	0.55	0.48	0.72	0.75	0.75	0.79	0.76	0.80	0.74	0.71
Final		2.03	1.92	1.91	1.66	1.85	1.83	1.79	1.94	1.87	1.85	2.02	2.00

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VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

Vazhakulam P.O., Muvattupuzha-686 670, Kerala

Tel: 0485 2262211, 2262255, 9496335522

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Established in 2001

Managed by Catholic Diocese Kothamangalam



VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM							
Department of Mechanical Engineering							
CO Attainment of 2016-2020 batch							
Course Code	CO1	CO2	CO3	CO4	CO5	CO6	AVG
C101	3.00	3.00	2.95	3.00	3.00	3.00	2.99
C102	3.00	2.97	3.00	3.00	3.00	3.00	2.99
C103	3.00	2.80	3.00	2.50	3.00	3.00	2.88
C104	3.00	2.90	3.00	2.90	3.00	3.00	2.97
C105	2.95	2.90	2.70	3.00	3.00	2.80	2.89
C107	3.00	3.00	3.00	3.00	2.70	2.70	2.90
C111	3.00	3.00	2.90	2.95	2.95	2.90	2.95
C112	2.70	2.50	2.60	2.70	2.70	2.70	2.65
C114	2.85	2.95	3.00	3.00	2.40	2.40	2.77
C115	3.00	3.00	3.00	3.00	3.00	2.94	2.99
C116	3.00	2.50	3.00	2.50	3.00	3.00	2.83
C117	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C118	3.00	3.00	3.00	3.00	3.00	-	3.00
C119	3.00	3.00	3.00	3.00	3.00	-	3.00
C120	2.75	3.00	3.00	3.00	-	-	2.94
C121	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C123	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C124	3.00	3.00	3.00	3.00	3.00	-	3.00
C201	2.55	2.30	2.40	2.60	2.60	2.10	2.43
C202	2.00	1.83	2.10	1.95	2.05	2.20	2.02
C203	3.00	2.90	2.90	2.50	3.00	3.00	2.88
C204	2.60	2.60	2.57	2.10	2.30	2.00	2.36
C205	2.97	2.77	2.85	2.60	3.00	2.90	2.85
C207	3.00	2.10	3.00	3.00	3.00	2.10	2.70
C208	3.00	2.50	3.00	3.00	3.00	-	2.90
C209	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C210	3.00	2.80	2.70	2.70	3.00	3.00	2.87
C211	1.80	1.88	1.80	1.95	1.95	1.05	1.74
C212	2.58	2.35	2.65	2.65	2.20	1.75	2.36
C213	2.30	2.30	2.00	2.00	1.40	-	2.00
C214	2.80	3.00	3.00	3.00	3.00	3.00	2.97
C206	2.20	1.90	1.90	2.20	2.20	2.20	2.10
C215	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C216	3.00	3.00	3.00	3.00	3.00	-	3.00
C301	3.00	2.80	2.70	2.70	2.10	-	2.66
C302	2.20	2.20	2.20	1.80	2.20	1.60	2.03
C303	3.00	3.00	3.00	3.00	3.00	2.93	2.99
C304	2.20	1.90	1.90	2.20	2.20	2.20	2.10
C305	3.00	3.00	3.00	3.00	2.90	3.00	2.98
C306 L04	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C306 L06	3.00	3.00	2.85	3.00	2.10	-	2.79
C307	3.00	3.00	3.00	3.00	-	-	3.00
C308	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C309	3.00	3.00	3.00	3.00	3.00	-	3.00
C310	2.93	2.85	3.00	2.70	3.00	3.00	2.91
C311	2.80	2.40	3.00	2.40	2.60	-	2.64
C312	3.00	3.00	3.00	3.00	2.55	2.55	2.85
C313	3.00	3.00	3.00	2.40	2.10	3.00	2.75
C314	2.55	2.93	3.00	3.00	3.00	3.00	2.91
C315 L03	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C315 L04	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C316	3.00	3.00	3.00	3.00	-	-	3.00
C317	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C318	3.00	-	-	-	-	-	3.00
C401	3.00	2.70	3.00	2.10	2.10	-	2.58
C402	3.00	3.00	3.00	3.00	2.10	2.55	2.78
C403	3.00	2.93	3.00	3.00	2.55	2.55	2.84
C404	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C405	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C406 L04	2.43	2.35	2.35	2.20	2.65	2.65	2.44
C406 L05	2.70	3.00	2.85	2.10	3.00	-	2.73
C407	3.00	3.00	3.00	3.00	-	-	3.00
C408	3.00	3.00	3.00	3.00	3.00	-	3.00
C409	2.43	2.35	2.35	2.20	2.65	-	2.40
C410	2.70	3.00	2.85	2.10	3.00	2.55	2.70
C411 L03	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C411 L07	3.00	3.00	3.00	3.00	3.00	-	3.00
C412 L10	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C412 L13	3.00	3.00	3.00	3.00	3.00	3.00	3.00
C412 L14	3.00	3.00	2.85	3.00	3.00	3.00	2.98
C412 L23	3.00	3.00	3.00	3.00	2.10	-	2.82
C413	3.00	3.00	3.00	3.00	3.00	-	3.00

Dr. A. Shunmugesh
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Viswajyothi College of Engineering
and Technology
Vazhakulam P.O., Muvattupuzha-686 670



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VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM												
Department of Mechanical Engineering												
Actual values of attainment of Program Outcomes of 2016-2020 batch												
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	2.495	2.165	2.325	1.995	1.495	1.495	2	1.99	-	-	-	1.83
C102	1.83	1	1	1	1	1	-	-	-	-	-	1
C103	1.92	1.97	1.80	2	1.885	1.89	2	-	-	-	-	1.905
C104	2.00	1.00	2.00	-	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00
C105	2.89	2.89	1.93	1.93	2	-	0.965	1.93	-	1.94	-	0.965
C107	1.855	0.925	0.93	0.93	-	-	1	-	-	-	-	1.095
C111	1	-	0.97	-	1.87	1.46	2.9	1.93	1.93	0.97	-	1.13
C112	2.00	1.00	2.00	-	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00
C114	2.00	1.00	2.00	-	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00
C115	1.995	1.495	1.67	1	1.495	1.995	1.165	-	0.995	-	1.165	1.995
C116	1.89	2	1.1	1	0.915	-	0.835	0.945	1.89	0.915	1	0.945
C117	2.00	1.00	2.00	-	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00
C118	1.78	0.9	1.6	-	1.8	1.8	0.9	0.9	1.89	0.8	0.8	1.6
C119	2.00	2.00	2.00	2.00	1.60	2.00	2.00	2.00	2.00	2.00	2.00	2.00
C120	2.94	1.73	1.48	0.98	0.96	1.47	-	0.96	1.96	0.98	-	1.96
C121	2.00	1.00	2.00	-	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00
C123	3	3	2	1	1	1	-	1	-	-	-	1.67
C124	3.00	3.00	3.00	3.00	3.00	2.50	2.60	2.75	2.33	2.33	2.33	2.60
C201	2.87	2.87	1.91	1.57	0.87	0.92	-	-	0.96	1.93	-	1.9
C202	1.87	1.495	1.675	0.83	-	0.7	-	1.87	-	-	-	1.87
C203	2.27	1.96	1.46	1.46	1.33	0.97	1	-	0.97	0.97	-	1.96
C204	1.91	1.91	1.85	1.36	0.9	-	1.24	-	0.68	0.68	1.11	0.65
C205	2.065	2.21	2.21	2.07	1.915	-	1.99	-	-	-	-	1.58
C207	1.91	1.91	1.85	1.36	0.9	-	1.24	-	0.68	0.68	1.11	0.65
C208	2.54	1.57	2.54	-	1.94	-	-	-	-	2.14	1.57	1.77
C209	2.83	2.00	2.00	2.00	1.00	1.67	1.33	2.00	2.83	2.67	1.33	2.33
C210	2.73	2.40	2.08	1.91	1.42	1.33	-	-	0.98	-	-	2.27
C211	1.17	1.17	1.17	1.17	-	-	-	1.17	-	-	-	1.17
C212	2.37	2.37	2.22	2.40	1.56	1.47	1.53	-	-	-	-	2.22
C213	1.18	0.79	0.79	0.79	-	0.79	-	-	0.79	0.39	-	0.79
C214	2.97	1.98	1.98	0.99	0.99	-	-	-	-	-	0.99	0.99
C206	-	1.27	2.20	1.27	-	-	-	1.37	-	-	-	1.47
C215	2.00	1.50	2.00	1.25	1.25	1.50	1.50	1.50	1.50	1.50	1.50	1.50
C216	3.00	2.00	1.60	2.00	-	2.00	-	2.00	2.40	2.00	2.00	2.00
C301	2.66	1.77	-	-	-	1.60	-	-	-	-	-	-
C302	2.00	1.50	2.00	1.25	1.25	1.50	1.50	1.50	1.50	1.50	1.50	1.50
C303	1.99	1.50	1.67	1.00	1.95	1.99	1.00	1.00	1.00	-	-	1.99
C304	2.83	3.00	2.75	2.00	2.33	2.00	2.00	2.00	2.00	2.00	-	2.00
C305	2.99	-	-	-	-	-	-	2.82	2.49	2.16	2.16	2.82
C306 L04	2.83	3.00	2.75	2.00	2.33	2.00	2.00	2.00	2.00	2.00	-	2.00
C306 L06	1.34	1.68	2.02	1.34	-	1.37	2.10	1.40	-	-	-	1.68
C307	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C308	2.83	3.00	2.75	2.00	2.33	2.00	2.00	2.00	2.00	2.00	-	2.00
C309	2.50	2.00	2.00	-	1.33	-	1.50	-	-	2.00	2.00	3.00
C310	1.94	1.45	1.61	0.97	2.00	1.94	0.99	0.98	0.96	-	-	1.94
C311	2.58	2.06	2.06	1.40	-	1.73	1.70	1.70	1.48	1.48	-	1.65
C312	2.70	0.90	1.80	0.85	0.90	0.90	0.90	0.90	0.90	0.90	-	0.90
C313	2.58	2.70	1.80	2.55	1.72	-	-	-	-	-	-	1.83
C314	1.94	1.45	1.61	0.97	2.00	1.94	0.99	0.98	0.96	-	-	1.94
C315 L03	3.00	2.00	2.00	1.00	1.00	-	-	-	-	-	1.00	1.00
C315 L04	1.94	1.45	1.61	0.97	2.00	1.94	0.99	0.98	0.96	-	-	1.94
C316	3.00	2.00	2.00	-	3.00	2.00	2.00	2.00	2.75	3.00	-	2.00
C317	3.00	2.50	2.67	2.00	2.00	-	-	2.00	2.00	2.00	2.00	2.00
C318	2.00	1.50	2.00	1.25	1.25	1.50	1.50	1.50	1.50	1.50	1.50	1.50
C401	2.58	2.06	2.06	1.40	-	1.73	1.70	1.70	1.48	1.48	-	1.65
C402	1.55	-	-	-	-	1.21	1.21	-	-	-	-	-
C403	1.99	1.49	1.66	1.00	2.00	1.99	1.00	0.99	1.00	-	-	1.99
C404	1.59	1.70	2.55	2.33	1.70	-	-	-	-	-	1.40	1.40
C405	1.74	2.35	2.83	2.18	2.00	2.00	2.00	-	-	-	-	-
C406 L04	1.76	2.04	-	1.45	1.25	-	-	-	-	0.80	-	1.23
C406 L05	2.73	2.18	2.36	2.15	-	1.64	-	-	-	-	-	2.83
C407	3.00	2.33	2.50	2.00	-	2.00	2.00	3.00	3.00	3.00	3.00	3.00
C408	2.00	1.00	1.00	1.00	1.00	-	-	-	-	-	-	-
C409	2.00	2.20	3.00	-	-	-	-	-	-	-	-	-
C410	1.75	1.59	1.75	0.70	-	1.40	-	-	2.00	-	1.82	1.11
C411 L03	2.40	2.00	1.10	2.00	1.80	2.00	1.90	1.50	2.00	2.00	-	1.85
C411 L07	1.67	2.00	3.00	2.00	3.00	1.98	2.23	2.00	1.50	1.50	2.33	1.82
C412 L10	1.76	2.04	-	1.45	1.25	-	-	-	-	0.80	-	1.23
C412 L13	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
C412 L14	1.76	2.04	-	1.45	1.25	-	-	-	-	0.99	-	1.11
C412 L23	0.94	-	-	-	-	2.82	1.88	2.82	-	-	-	1.48
C412	2.50	2.33	2.67	2.67	2.00	3.00	3.00	2.00	2.00	2.50	3.00	3.00
Direct Attainment (Maximum value 3)	2.19	1.84	1.94	1.54	1.65	1.71	1.81	1.62	1.66	1.54	1.54	1.73
Indirect Attainment (Maximum value 3)	2.21	2.11	2.04	1.95	1.91	1.89	1.92	2.10	2.10	2.17	1.96	2.05
Direct Attainment (Weightage 70%)	1.53	1.29	1.36	1.08	1.16	1.20	1.06	1.13	1.16	1.07	1.08	1.21
Indirect Attainment (Weightage 30%)	0.66	0.63	0.61	0.59	0.57	0.57	0.58	0.63	0.63	0.65	0.59	0.62
Final attainment	2.20	1.92	1.97	1.66	1.73	1.76	1.64	1.76	1.79	1.73	1.67	1.83

ICF

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VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MANAGEMENT STUDIES

Vazhakulam P.O., Muvattupuzha, Ernakulam, Kerala - 686670

CO ATTAINMENT

Batch: 2018-2020

TRIMESTER	COURSE CODE	CO1	CO2	CO3	CO4	CO5	AVG
T1	C101	0.8	0.8	0.8	0.8	0.8	0.8
	C102	2.4	2.4	2.4	2.4	2.4	2.4
	C103	2.4	2.4	2.4	2.4	2.4	2.4
	C104	0.6	0.6	0.6	0.6	0.6	0.6
	C105	0.6	0.6	0.6	0.6	0.6	0.6
	C106	0.6	0.6	0.6	0.6	0.6	0.6
	C107	-	-	-	-	-	-
T2	C201	2.4	2.4	2.4	2.4	2.4	2.4
	C202	2.4	2.4	2.4	2.4	2.4	2.4
	C203	2.4	2.4	2.4	2.4	2.4	2.4
	C204	2.4	2.4	2.4	2.4	2.4	2.4
	C205	2.4	2.4	2.4	2.4	2.4	2.4
	C206	2.4	2.4	2.4	2.4	2.4	2.4
	C207	-	-	-	-	-	-
T3	C301	2.4	2.4	2.4	2.4	2.4	2.4
	C302	2.4	2.4	2.4	2.4	2.4	2.4
	C303	2.4	2.4	2.4	2.4	2.4	2.4
	C304	2.4	2.4	2.4	2.4	2.4	2.4
	C305	2.4	2.4	2.4	2.4	2.4	2.4
	C306	0.8	0.8	0.8	0.8	0.8	0.8
	C307	2.4	2.4	2.4	2.4	2.4	2.4
	C308	-	-	-	-	-	-
	C401	2.4	2.4	2.4	2.4	2.4	2.4



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T4	C402	2.4	2.4	2.4	2.4	2.4	2.4
	C404	2.4	2.4	2.4	2.4	2.4	2.4
	C406	2.4	2.4	2.4	2.4	2.4	2.4
	C415	2.4	2.4	2.4	2.4	2.4	2.4
	C408	0.6	0.6	0.6	0.6	0.6	0.6
	C411	2.4	2.4	2.4	2.4	2.4	2.4
	C412	2.4	2.4	2.4	2.4	2.4	2.4
	C413	2.4	2.4	2.4	2.4	2.4	2.4
	C414	2.4	2.4	2.4	2.4	2.4	2.4
T5	C501	2.4	2.4	2.4	2.4	2.4	2.4
	C502	2.4	2.4	2.4	2.4	2.4	2.4
	C504	2.4	2.4	2.4	2.4	2.4	2.4
	C508	2.4	2.4	2.4	2.4	2.4	2.4
	C510	2.4	2.4	2.4	2.4	2.4	2.4
	C512	2.4	2.4	2.4	2.4	2.4	2.4
	C513	2.4	2.4	2.4	2.4	2.4	2.4
	C514	2.4	2.4	2.4	2.4	2.4	2.4
	C515	2.4	2.4	2.4	2.4	2.4	2.4
	C516	2.4	2.4	2.4	2.4	2.4	2.4
T6	C601	2.4	2.4	2.4	2.4	2.4	2.4
	C602	2.4	2.4	2.4	2.4	2.4	2.4
	C606	2.4	2.4	2.4	2.4	2.4	2.4
	C607	2.4	2.4	2.4	2.4	2.4	2.4
	C608	2.4	2.4	2.4	2.4	2.4	2.4



Dr. Cyriac Joseph
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VISWAJYOTHI

COLLEGE OF ENGINEERING & TECHNOLOGY

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DEPARTMENT OF MANAGEMENT STUDIES

Vazhakulam P.O., Muvattupuzha, Ernakulam, Kerala - 686670

PO ATTAINMENT

Batch: 2018-2020

TRIMESTER	COURSE CODE	PO1	PO2	PO3	PO4	PO5
T1	C101	0.8	0.8	0.8	0.8	0.8
	C102	2.4	2.4	2.4	2.4	2.4
	C103	2.4	2.4	2.4	2.4	2.4
	C104	2.40	1.92	1.76	2.08	2.40
	C105	2.40	2.40	-	1.60	1.60
	C106	2.08	2.40	-	1.00	-
	C107	-	-	-	-	-
T2	C201	2.08	1.92	1.76	2.08	1.60
	C202	1.60	2.20	0.80	0.80	0.80
	C203	2.08	2.40	-	0.80	-
	C204	2.40	1.40	-	-	1.20
	C205	2.40	2.40	-	1.60	1.60
	C206	2.08	2.40	-	1.00	-
	C207	-	-	-	-	-
T3	C301	1.60	0.80	0.80	0.80	0.80
	C302	2.40	2.40	1.60	1.60	1.60
	C303	2.40	1.00	1.20	1.76	1.33
	C304	2.40	1.60	1.22	1.28	1.80
	C305	1.60	1.00	0.80	0.80	1.60
	C306	0.69	0.80	-	0.27	-
	C307	1.44	2.08	1.44	1.44	2.00
	C308	-	-	-	-	-
	C401	1.92	1.12	0.80	1.12	1.00

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T4	C402	2.24	0.80	1.07	1.76	1.33
	C404	1.76	1.60	-	1.92	-
	C406	1.60	0.80	0.80	0.80	0.80
	C415	2.08	1.76	1.28	0.96	1.76
	C408	1.60	0.80	0.80	0.80	0.80
	C411	1.60	0.80	0.80	0.80	0.80
	C412	1.60	0.80	-	0.80	0.80
	C413	2.24	0.80	0.80	1.60	0.80
	C414	1.60	0.80	-	0.80	0.80
T5	C501	1.60	0.48	1.28	1.28	1.12
	C502	2.24	1.60	1.92	1.92	1.60
	C504	1.60	0.80	0.80	0.80	0.80
	C508	1.76	1.12	0.80	0.96	0.80
	C510	1.60	1.33	1.00	1.40	1.40
	C512	2.24	2.24	0.80	1.40	1.00
	C513	1.76	0.96	-	0.96	1.07
	C514	1.60	0.80	-	0.80	0.80
	C515	1.60	1.00	2.40	-	-
	C516	1.60	0.80	-	0.80	0.80
T6	C601	2.24	1.44	0.96	1.60	1.76
	C602	1.44	1.12	1.33	1.40	1.60
	C606	2.49	2.24	1.20	1.60	1.60
	C607	1.76	0.96	-	0.96	1.33
	C608	-	-	-	-	-



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