

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Consolidated Course outcome for all subjects –Regulation(2021)

Semester No :	01		
Course Title:	PROFESSIONAL ENGLISH -I	Course Code:	HS3152
Course Outcome No.	Course Outcome Statement		
CO-1	To use appropriate words in a professional context		
CO-2	To gain understanding of basic grammatic structures and use them in right context.		
CO-3	To read and infer the denotative and connotative meanings of technical texts		
CO-4	To write definitions, descriptions, narrations and essays on various topics		
CO-5	To develop learners' ability to read and write complex texts, summaries, articles, blogs, definitions, essays and user manuals.		
Course Title	MATRICES AND CALCULUS	Course Code:	MA3151
Course Outcome No	Course Outcome Statement		
CO-1	Use the matrix algebra methods for solving practical problems.		
CO-2	Apply differential calculus tools in solving various application problems.		
CO-3	Able to use differential calculus ideas on several variable functions.		
CO-4	Apply different methods of integration in solving practical problems.		
CO-5	Apply multiple integral ideas in solving areas, volumes and other practical problems.		
Course Title	ENGINEERING PHYSICS	Course Code:	PH3151
Course Outcome No	Course Outcome Statement		
CO-1	Understand the importance of mechanics.		
CO-2	Express their knowledge in electromagnetic waves.		
CO-3	Demonstrate a strong foundational knowledge in oscillations, optics and lasers.		
CO-4	Understand the importance of quantum physics.		
CO-5	Comprehend and apply quantum mechanical principles towards the formation of energy bands.		
Course Title	ENGINEERING CHEMISTRY	Course Code:	CY3151
Course Outcome No	Course Outcome Statement		
CO-1	To infer the quality of water from quality parameter data and propose suitable treatment methodologies to treat water.		
CO-2	To identify and apply basic concepts of nanoscience and nanotechnology in designing the synthesis of nanomaterials for engineering and technology applications.		
CO-3	To apply the knowledge of phase rule and composites for material selection requirements.		
CO-4	To recommend suitable fuels for engineering processes and applications.		
CO-5	To recognize different forms of energy resources and apply them for suitable applications in energy sectors.		

Course Title	PROBLEM SOLVING AND PYTHON PROGRAMMING	Course Code:	GE3151
Course Outcome No	Course Outcome Statement		
CO-1	Develop algorithmic solutions to simple computational problems.		
CO-2	Develop and execute simple Python programs.		
CO-3	Write simple Python programs using conditionals and loops for solving problems		
CO-4	Decompose a Python program into functions.		
CO-5	Represent compound data using Python lists, tuples, dictionaries etc.		
Course Title	PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY	Course Code:	GE3171
Course Outcome No	Course Outcome Statement		
CO-1	Develop algorithmic solutions to simple computational problems		
CO-2	Develop and execute simple Python programs.		
CO-3	Implement programs in Python using conditionals and loops for solving problems.		
CO-4	Deploy functions to decompose a Python program.		
CO-5	Process compound data using Python data structures.		
Course Title	PHYSICS AND CHEMISTRY LABORATORY	Course Code:	BS3171
Course Outcome No	Course Outcome Statement		
CO-1	To understand the functioning of various kinds of physics laboratory equipment.		
CO-2	To Use graphical models to analyze laboratory data.		
CO-3	To Use mathematical models as a medium for quantitative reasoning and describing physical reality.		
CO-4	To Access, process and analyze scientific information.		
CO-5	Solve problems individually and collaboratively.		
Semester No :	02		
Course Title	PROFESSIONAL ENGLISH - II	Course Code:	HS3252
Course Outcome No	Course Outcome Statement		
CO-1	To compare and contrast products and ideas in technical texts.		
CO-2	To identify and report cause and effects in events, industrial processes through technical texts		
CO-3	To analyze problems in order to arrive at feasible solutions and communicate them in the written format.		
CO-4	To present their ideas and opinions in a planned and logical manner.		
CO-5	To draft effective resumes in the context of job search.		
Course Title	STATISTICS AND NUMERICAL METHODS	Course Code:	MA3251
Course Outcome No	Course Outcome Statement		

CO-1	Apply the concept of testing of hypothesis for small and large samples in real life problems.		
CO-2	Apply the basic concepts of classifications of design of experiments in the field of agriculture.		
CO-3	Appreciate the numerical techniques of interpolation in various intervals and apply the numerical techniques of differentiation and integration for engineering problems.		
CO-4	Understand the knowledge of various techniques and methods for solving first and second order ordinary differential equations.		
CO-5	Solve the partial and ordinary differential equations with initial and boundary conditions by using certain techniques with engineering applications.		
Course Title	PHYSICS FOR ELECTRICAL ENGINEERING	Course Code:	PH3202
Course Outcome No	Course Outcome Statement		
CO-1	To know basics of dielectric materials and insulation.		
CO-2	To gain knowledge on the electrical and magnetic properties of materials and their applications.		
CO-3	To understand clearly of semiconductor physics and functioning of semiconductor devices.		
CO-4	To understand the optical properties of materials and working principles of various optical devices.		
CO-5	To appreciate the importance of nanotechnology and nanodevices.		
Course Title	BASIC CIVIL AND MECHANICAL ENGINEERING	Course Code:	BE3255
Course Outcome No	Course Outcome Statement		
CO-1	Understanding profession of Civil and Mechanical engineering.		
CO-2	Summarise the planning of building, infrastructure and working of Machineries.		
CO-3	Apply the knowledge gained in respective discipline		
CO-4	Illustrate the ideas of Civil and Mechanical Engineering applications.		
CO-5	Appraise the material, Structures, machines and energy.		
Course Title	ENGINEERING GRAPHICS	Course Code:	GE3251
Course Outcome No	Course Outcome Statement		
CO-1	Use BIS conventions and specifications for engineering drawing.		
CO-2	Construct the conic curves, involutes and cycloid.		
CO-3	Solve practical problems involving projection of lines.		
CO-4	Draw the orthographic, isometric and perspective projections of simple solids.		
CO-5	Draw the development of simple solids.		
Course Title	PROGRAMMING IN C	Course Code:	CS3251
Course Outcome No	Course Outcome Statement		
CO-1	Demonstrate knowledge on C Programming constructs		
CO-2	Develop simple applications in C using basic constructs		
CO-3	Design and implement applications using arrays and strings		

CO-4	Develop and implement modular applications in C using function and applications in C using structures and pointers		
CO-5	Design applications using sequential and random access file processing.		
Course Title	ENGINEERING PRACTICES LABORATORY	Course Code:	GE3271
Course Outcome No	Course Outcome Statement		
CO-1	Drawing pipe line plan; laying and connecting various pipe fittings used in common house hold plumbing work; Sawing; planning; making joints in wood materials used in commonHouse hold wood work.		
CO-2	Wiring various electrical joints in common house hold electrical wire work		
CO-3	Welding various joints in steel plates using arc welding work; Machining various simple processes like turning, drilling, tapping in parts; Assembling simple mechanical assembly ofCommon house hold equipments; Making a tray out of metal sheet using sheet metal work.		
CO-4	Soldering and testing simple electronic circuits; Assembling and testing simple electronic components on PCB.		
Course Title	PROGRAMMING IN C LABORATORY	Course Code:	CS3271
Course Outcome No	Course Outcome Statement		
CO-1	Demonstrate knowledge on C programming constructs and Develop programs in C using basic constructs.		
CO-2	Develop programs in C using arrays.		
CO-3	Develop applications in C using strings, pointers, functions.		
CO-4	Develop applications in C using structures.		
CO-5	Develop applications in C using file processing.		

Semester No :	03		
Course Title	DISCRETE MATHEMATICS	Course Code:	MA3354
Course Outcome No	Course Outcome Statement		
CO-1	Have knowledge of the concepts needed to test the logic of a program.		
CO-2	Have an understanding in identifying structures on many levels.		
CO-3	Be aware of a class of functions which transform a finite set into another finite set which relates to input and output functions in computer science.		
CO-4	Be aware of the counting principles.		
CO-5	Be exposed to concepts and properties of algebraic structures such as groups, rings and fields.		
Course Title	DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION	Course Code:	CS3351
Course Outcome No	Course Outcome Statement		

CO-1	Design various combinational digital circuits using logic gates		
CO-2	Design sequential circuits and analyze the design procedures		
CO-3	State the fundamentals of computer systems and analyze the execution of an instruction		
CO-4	Analyze different types of control design and identify hazards		
CO-5	Identify the characteristics of various memory systems and I/O communication		
Course Title	FOUNDATIONS OF DATA SCIENCE	Course Code:	CS3352
Course Outcome No	Course Outcome Statement		
CO-1	Define the data science process		
CO-2	Understand different types of data description for data science process		
CO-3	Gain knowledge on relationships between data		
CO-4	Use the Python Libraries for Data Wrangling		
CO-5	Apply visualization Libraries in Python to interpret and explore data		
Course Title	DATA STRUCTURES	Course Code:	CS3301
Course Outcome No	Course Outcome Statement		
CO-1	Define linear and non-linear data structures.		
CO-2	Implement linear and non-linear data structure operations.		
CO-3	Use appropriate linear/non-linear data structure operations for solving a given problem.		
CO-4	Apply appropriate graph algorithms for graph applications.		
CO-5	Analyze the various searching and sorting algorithms.		
Course Title	OBJECT ORIENTED PROGRAMMING	Course Code:	CS3391
Course Outcome No	Course Outcome Statement		
CO-1	Apply the concepts of classes and objects to solve simple problems		
CO-2	Develop programs using inheritance, packages and interfaces		
CO-3	Make use of exception handling mechanisms and multithreaded model to solve real world problems		
CO-4	Build Java applications with I/O packages, string classes, Collections and generics concepts		
CO-5	Integrate the concepts of event handling and JavaFX components and controls for developing GUI based applications		
Course Title	DATA STRUCTURES LABORATORY	Course Code:	CS3311
Course Outcome No	Course Outcome Statement		
CO-1	Implement Linear data structure algorithms.		

CO-2	Implement applications using Stacks and Linked lists		
CO-3	Implement Binary Search tree and AVL tree operations.		
CO-4	Implement graph algorithms.		
CO-5	Analyze the various searching and sorting algorithms.		
Course Title	OBJECT ORIENTED PROGRAMMING LABORATORY	Course Code:	CS3381
Course Outcome No	Course Outcome Statement		
CO-1	Design and develop java programs using object oriented programming concepts.		
CO-2	Develop simple applications using object oriented concepts such as package, exceptions		
CO-3	Implement multithreading, and generics concepts		
CO-4	Create GUIs and event driven programming applications for real world problems		
CO-5	Implement and deploy web applications using Java		
Course Title	DATA SCIENCE LABORATORY	Course Code:	CS3361
Course Outcome No	Course Outcome Statement		
CO-1	Make use of the python libraries for data science		
CO-2	Make use of the basic Statistical and Probability measures for data science.		
CO-3	Perform descriptive analytics on the benchmark data sets.		
CO-4	Perform correlation and regression analytics on standard data sets		
CO-5	Present and interpret data using visualization packages in Python.		
Course Title	PROFESSIONAL DEVELOPMENT	Course Code:	GE3361
Course Outcome No	Course Outcome Statement		
CO-1	Use MS Word to create quality documents by structuring and organizing content for their day-to-day technical and academic requirements.		
CO-2	Use MS Excel to perform data operations and analytics ,record, retrieve, and visualize data as per requirements for ease of understanding.		
CO-3	Use MS PowerPoint to create high-quality academic presentations by including tables, charts, graphs, interlinking elements, and using media objects.		
CO-4	Integrate multiple MS Office applications (Word, Excel, PowerPoint) to build consolidated and professional documents, reports or presentations that demonstrate real-world workflows.		
CO-5	Apply advanced features of MS Office (such as mail-merge, macros, templates, themes, animations, data linking) to enhance productivity, accuracy and presentation-effectiveness in academic and technical contexts.		

Semester No :	04		
Course Title	THEORY OF COMPUTATION	Course Code:	CS3452
Course Outcome No	Course Outcome Statement		
CO-1	Construct automata theory using Finite Automata		
CO-2	Write regular expressions for any pattern		
CO-3	Design context free grammar and Pushdown Automata		
CO-4	Design Turing machine for computational functions		
CO-5	Differentiate between decidable and undecidable problems		
Course Title	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	Course Code:	CS3491
Course Outcome No	Course Outcome Statement		
CO-1	Use appropriate search algorithms for problem solving.		
CO-2	Apply reasoning under uncertainty		
CO-3	Build supervised learning models		
CO-4	Build ensembling and unsupervised models		
CO-5	Build deep learning neural network models		
Course Title	DATABASE MANAGEMENT SYSTEMS	Course Code:	CS3492
Course Outcome No	Course Outcome Statement		
CO-1	Construct SQL Queries using relational algebra		
CO-2	Design database using ER model and normalize the database		
CO-3	Construct queries to handle transaction processing and maintain consistency of the database		
CO-4	Compare and contrast various indexing strategies and apply the knowledge to tune the performance of the database		
CO-5	Appraise how advanced databases differ from Relational Databases and find a suitable database for the given requirement.		
Course Title	ALGORITHMS	Course Code:	CS3401
Course Outcome No	Course Outcome Statement		
CO-1	Analyze the efficiency of algorithms using various frameworks		
CO-2	Apply graph algorithms to solve problems and analyze their efficiency.		
CO-3	Make use of algorithm design techniques like divide and conquer, dynamic programming and greedy techniques to solve problems		
CO-4	Use the state space tree method for solving problems		

CO-5	Solve problems using approximation algorithms and randomized algorithms		
Course Title	INTRODUCTION TO OPERATING SYSTEMS	Course Code:	CS3451
Course Outcome No	Course Outcome Statement		
CO-1	Analyze various scheduling algorithms and process synchronization.		
CO-2	Explain deadlock prevention and avoidance algorithms.		
CO-3	Compare and contrast various memory management schemes.		
CO-4	Explain the functionality of file systems, I/O systems, and Virtualization		
CO-5	Compare iOS and Android Operating Systems.		
Course Title	ENVIRONMENTAL SCIENCES AND SUSTAINABILITY	Course Code:	GE3451
Course Outcome No	Course Outcome Statement		
CO-1	To recognize and understand the functions of environment, ecosystems and biodiversity and their conservation.		
CO-2	To identify the causes, effects of environmental pollution and natural disasters and contribute to the preventive measures in the society.		
CO-3	To identify and apply the understanding of renewable and non-renewable resources and contribute to the sustainable measures to preserve them for future generations.		
CO-4	To recognize the different goals of sustainable development and apply them for suitable technological advancement and societal development.		
CO-5	To demonstrate the knowledge of sustainability practices and identify green materials, energy cycles and the role of sustainable urbanization.		
Course Title	OPERATING SYSTEMS LABORATORY	Course Code:	CS3461
Course Outcome No	Course Outcome Statement		
CO-1	Define and implement UNIX Commands.		
CO-2	Compare the performance of various CPU Scheduling Algorithms.		
CO-3	Compare and contrast various Memory Allocation Methods.		
CO-4	Define File Organization and File Allocation Strategies.		
CO-5	Implement various Disk Scheduling Algorithms.		
Course Title	DATABASE MANAGEMENT SYSTEMS LABORATORY	Course Code:	CS3481
Course Outcome No	Course Outcome Statement		
CO-1	Create databases with different types of key constraints.		
CO-2	Construct simple and complex SQL queries using DML and DCL commands.		
CO-3	Use advanced features such as stored procedures and triggers and incorporate in GUI based application development.		
CO-4	Create an XML database and validate with meta-data (XML schema).		
CO-5	Create and manipulate data using NOSQL database.		

Semester No :	05		
Course Title	COMPUTER NETWORKS	Course Code:	CS3591
Course Outcome No	Course Outcome Statement		
CO-1	Explain the basic layers and its functions in computer networks.		
CO-2	Understand the basics of how data flows from one node to another.		
CO-3	Analyze routing algorithms.		
CO-4	Describe protocols for various functions in the network.		
CO-5	Describe protocols for various functions in the network.		
Course Title	COMPILER DESIGN	Course Code:	CS3501
Course Outcome No	Course Outcome Statement		
CO-1	Understand the techniques in different phases of a compiler.		
CO-2	Design a lexical analyser for a sample language and learn to use the LEX tool.		
CO-3	Apply different parsing algorithms to develop a parser and learn to use YACC tool		
CO-4	Understand semantics rules (SDT), intermediate code generation and run-time environment.		
CO-5	Implement code generation and apply code optimization techniques.		
Course Title	CRYPTOGRAPHY AND CYBER SECURITY	Course Code:	CB3491
Course Outcome No	Course Outcome Statement		
CO-1	Understand the fundamentals of networks security, security architecture, threats and vulnerabilities		
CO-2	Apply the different cryptographic operations of symmetric cryptographic algorithms		
CO-3	Apply the different cryptographic operations of public key cryptography		
CO-4	Apply the various Authentication schemes to simulate different applications.		
CO-5	Understand various cyber crimes and cyber security.		
Course Title	Distributed Computing	Course Code:	CS3551
Course Outcome No	Course Outcome Statement		
CO-1	Explain the foundations of distributed systems (K2)		
CO-2	Solve synchronization and state consistency problems (K3)		
CO-3	Use resource sharing techniques in distributed systems (K3)		
CO-4	Apply working model of consensus and reliability of distributed systems (K3)		
CO-5	Explain the fundamentals of cloud computing (K2)		
Course Title	Big Data Analytics	Course Code:	CCS334
Course Outcome No	Course Outcome Statement		
CO-1	Describe big data and use cases from selected business domains.		

CO-2	Explain NoSQL big data management.		
CO-3	Install, configure, and run Hadoop and HDFS.		
CO-4	Perform map-reduce analytics using Hadoop.		
CO-5	Use Hadoop-related tools such as HBase, Cassandra, Pig, and Hive for big data analytics		
Course Title	Web Technologies	Course Code:	CCS375
Course Outcome No	Course Outcome Statement		
CO-1	Construct a basic website using HTML and Cascading Style Sheets		
CO-2	Build dynamic web page with validation using Java Script objects and by applying different event handling mechanisms.		
CO-3	Develop server side programs using Servlets and JSP.		
CO-4	Construct simple web pages in PHP and to represent data in XML format.		
CO-5	Develop interactive web applications.		
Course Title	Disaster Risk Reduction and Management	Course Code:	MX3084
Course Outcome No	Course Outcome Statement		
CO-1	To impart knowledge on the concepts of Disaster, Vulnerability and Disaster Risk reduction (DRR)		
CO-2	To enhance understanding on Hazards, Vulnerability and Disaster Risk Assessment prevention and risk reduction		
CO-3	To develop disaster response skills by adopting relevant tools and technology		
CO-4	Enhance awareness of institutional processes for Disaster response in the country		
CO-5	Develop rudimentary ability to respond to their surroundings with potential Disaster response in areas where they live, with due sensitivity		

Semester No :	06		
Course Title	Object Oriented Software Engineering	Course Code:	CCS356.
Course Outcome No	Course Outcome Statement		
CO-1	Compare various Software Development Lifecycle Models		
CO-2	Evaluate project management approaches as well as cost and schedule estimation strategies.		
CO-3	Perform formal analysis on specifications.		
CO-4	Use UML diagrams for analysis and design.		
CO-5	Architect and design using architectural styles and design patterns, and test the system.		
Course Title	Embedded Systems and IoT	Course Code:	CS3691
Course Outcome No	Course Outcome Statement		
CO-1	Explain the architecture of embedded processors.		
CO-2	Write embedded C programs.		

CO-3	Design simple embedded applications.		
CO-4	Compare the communication models in IOT		
CO-5	Design IoT applications using Arduino/Raspberry Pi /open platform.		
Course Title	Environmental And Social Impact Assessment	Course Code:	GE3451
Course Outcome No	Course Outcome Statement		
CO-1	Understand the fundamental concepts of Environmental Impact Assessment (EIA), sustainable development, legal frameworks, and the role of stakeholders in project planning.		
CO-2	Apply screening, scoping, baseline data collection, and various impact prediction methods (matrices, networks, checklists, and models) for environmental assessment.		
CO-3	Develop Environmental Management Plans (EMP), including mitigation measures, environmental monitoring programs, and prepare/review EIA reports.		
CO-4	Analyze socio-economic impacts, identify project-affected persons, and formulate rehabilitation and resettlement (R&R) plans along with economic valuation and cost–benefit analysis.		
CO-5	Evaluate real-world EIA case studies related to infrastructure, transportation, industrial, waste management, irrigation, and mining projects to understand practical applications of EIA.		
Course Title	Cloud Services Management	Course Code:	CCS336
Course Outcome No	Course Outcome Statement		
CO-1	Understand the fundamental concepts, terminology, characteristics, service models, and deployment models of cloud service management.		
CO-2	Explain cloud service strategy, policy, adoption drivers, risk management practices, and capacity–demand planning for effective cloud integration.		
CO-3	Apply cloud service lifecycle processes, design principles, migration techniques, benchmarking, and operational management in real-world scenarios.		
CO-4	Analyze cloud service pricing models, cost structures, procurement methods, and Capex–Opex shifts to support cloud financial management.		
CO-5	Evaluate cloud governance frameworks, risk matrices, and methods for measuring cloud service value using tools like Balanced Scorecard and Total Cost of Ownership (TCO).		
Course Title	Network Security	Course Code:	CCS354
Course Outcome No	Course Outcome Statement		
CO-1	Classify the encryption techniques		
CO-2	Illustrate the key management technique and authentication.		
CO-3	Evaluate the security techniques applied to network and transport layer		
CO-4	Discuss the application layer security standards.		
CO-5	Apply security practices for real time applications.		
Course Title	Digital Marketing	Course Code:	CCW332
Course Outcome No	Course Outcome Statement		

CO-1	To examine and explore the role and importance of digital marketing in today's rapidly changing business environment.		
CO-2	To focuses on how digital marketing can be utilized by organizations and how its effectiveness can be measured.		
CO-3	To know the key elements of a digital marketing strategy.		
CO-4	To study how the effectiveness of a digital marketing campaign can be measured		
CO-5	To demonstrate advanced practical skills in common digital marketing tools such as SEO, SEM, Social media and Blogs.		
Course Title	Cyber Security	Course Code:	CB3491
Course Outcome No	Course Outcome Statement		
CO-1	Explain the basics of cyber security, cyber crime and cyber law (K2)		
CO-2	Classify various types of attacks and learn the tools to launch the attacks (K2)		
CO-3	Apply various tools to perform information gathering (K3)		
CO-4	Apply intrusion techniques to detect intrusion (K3)		
CO-5	Apply intrusion prevention techniques to prevent intrusion (K3)		
Course Title	Industrial Safety	Course Code:	MX3089
Course Outcome No	Course Outcome Statement		
CO-1	Understand the basic concept of safety.		
CO-2	Obtain knowledge of Statutory Regulations and standards.		
CO-3	Know about the safety Activities of the Working Place.		
CO-4	Analyze on the impact of Occupational Exposures and their Remedies		
CO-5	Obtain knowledge of Risk Assessment Techniques.		

Semester No :	07		
Course Title	Human Values and Ethics	Course Code:	GE3791
Course Outcome No	Course Outcome Statement		
CO-1	Identify the importance of democratic, secular and scientific values in harmonious functioning of social life		
CO-2	Practice democratic and scientific values in both their personal and professional life		
CO-3	Find rational solutions to social problems.		
CO-4	Behave in an ethical manner in society		
CO-5	Practice critical thinking and the pursuit of truth.		
Course Title	Principles Of Management	Course Code:	GE 3751
Course Outcome No	Course Outcome Statement		
CO-1	Upon completion of the course, students will be able to have clear		

	understanding of managerial functions like planning, organizing, staffing, leading & controlling.		
CO-2	Have same basic knowledge on international aspect of management.		
CO-3	Ability to understand management concept of organizing.		
CO-4	Ability to understand management concept of directing.		
CO-5	Ability to understand management concept of controlling.		
Course Title	Aviation Management	Course Code:	OAE351
Course Outcome No	Course Outcome Statement		
CO-1	To interpret business difficulties.		
CO-2	To Dissect multicultural conditions.		
CO-3	To identify and apply the relevant analytical and logical skills to deal with problems in the airline industry.		
CO-4	To Develop well in teams, professionalism etc.		
CO-5	To apply the knowledge acquired in the field of airport planning, airport security, passengers forecasting, aerodromes work etc.		
Course Title	Renewable Energy Technologies	Course Code:	CME365
Course Outcome No	Course Outcome Statement		
CO-1	Discuss the Indian and global energy scenario.		
CO-2	Describe the various solar energy technologies and its applications.		
CO-3	Explain the various wind energy technologies.		
CO-4	Explore the various bio-energy technologies.		
CO-5	Discuss the ocean and geothermal technologies		
Course Title	Drone Technologies	Course Code:	CRA332
Course Outcome No	Course Outcome Statement		
CO-1	Know about a various type of drone technology, drone fabrication and programming.		
CO-2	Execute the suitable operating procedures for functioning a drone		
CO-3	Select appropriate sensors and actuators for Drones		
CO-4	Develop a drone mechanism for specific applications		
CO-5	Createthe programs for various drones		
Course Title	Summer Internship	Course Code:	C S3711
Course Outcome No	Course Outcome Statement		
CO-1	Gain exposure to real-time industry, laboratory, academia, or research environments and understand professional work culture.		
CO-2	Apply practical knowledge in areas such as product development, software design, development, testing, analytics, domain-specific tasks, and industry operations.		
CO-3	Develop problem-solving abilities through hands-on experience in real-world projects, tools, technologies, and workflows.		
CO-4	Enhance technical, communication, teamwork, and professional skills		

	required for industry, academia, business, and research sectors.
CO-5	Prepare and present a structured internship report demonstrating the skills gained, tasks performed, outcomes achieved, and reflections on industry practices.

Semester No :	08		
Course Title	Project Work/Internship	Course Code:	C S3811
Course Outcome No	Course Outcome Statement		
CO-1	Apply domain knowledge and technical skills to identify, analyze, and define real-time business or research problems.		
CO-2	Gather user requirements, design appropriate software/system solutions, and evaluate suitable alternatives.		
CO-3	Work effectively in teams by following industry practices, project workflows, and professional communication standards.		
CO-4	Implement, test, and deploy the designed solution on the target platform using appropriate tools and technologies.		
CO-5	Prepare a comprehensive project report and deliver an effective presentation demonstrating methodology, results, conclusions, and references.		



M.I.E.T. ENGINEERING COLLEGE (AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)
 Accredited by NBA (CIVIL, CSE, ECE, EEE & MECH)
 Accredited with 'A+' grade by NAAC
 (An ISO 9001:2015 Certified Institution)
 (Recognized by UGC under section 2(f) & 12(B) of UGC Act, 1956)
 TRICHY - PUDUKKOTTAI MAIN ROAD, TRICHY - 620 007



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Consolidated PO-PSO Mapping for all subjects –Regulation (2021)

COURSES	PROGRAMME OUTCOMES											PSO	
	1	2	3	4	5	6	7	8	9	10	11	1	2
C101-HS3152/PROFESSIONAL ENGLISH- I													
C101.1	1	1	1	1	1	3	3	1	3	-	3	-	-
C101.2	1	1	1	1	1	3	3	1	3	-	3	-	-
C101.3	2	3	2	3	2	3	3	2	3	3	3	-	-
C101.4	2	3	2	3	2	3	3	2	3	3	3	-	-
C101.5	2	3	3	3	-	3	3	2	3	-	3	-	-
Avg	1.6	2.2	1.8	2.2	1.5	3	3	1.6	3	3	3	-	-
C102-MA3151/MATRICES AND CALCULUS													
C102.1	3	3	1	1	0	0	0	2	0	2	3	-	-
C102.2	3	3	1	1	0	0	0	2	0	2	3	-	-
C102.3	3	3	1	1	0	0	0	2	0	2	3	-	-
C102.4	3	3	1	1	0	0	0	2	0	2	3	-	-
C102.5	3	3	1	1	0	0	0	2	0	2	3	-	-
Avg	3	3	1	1	0	0	0	2	0	2	3	-	-
103-PH3151/ENGINEERING PHYSICS													
C103.1	3	3	2	1	1	1	-	-	-	-	-	-	-
C103.2	3	3	2	1	2	1	-	-	-	-	-	-	-
C103.3	3	3	2	2	2	1	-	-	-	-	1	-	-
C103.4	3	3	1	1	2	1	-	-	-	-	-	-	-
C103.5	3	3	1	1	2	1	-	-	-	-	-	-	-
Avg	3	3	1.6	1.2	1.8	1	-	-	-	-	1	-	-
C104-CY3151/ENGINEERING CHEMISTRY													
C104.1	3	2	2	1	-	1	-	-	-	-	1	-	-
C104.2	2	-	-	1	-	2	-	-	-	-	-	-	-
C104.3	3	1	-	-	-	-	-	-	-	-	-	-	-
C104.4	3	1	1	-	-	1	-	-	-	-	-	-	-
C104.5	3	1	2	1	-	2	-	-	-	-	2	-	-
Avg	2.8	1.3	1.6	1.0	-	1.5	-	-	-	-	1.5	-	-

C105-GE3151/PROBLEM SOLVING AND PYTHON PROGRAMMING													
C105.1	3	3	3	3	2	-	-	-	-	2	2	3	3
C105.2	3	3	3	3	2	-	-	-	-	2	2	3	-
C105.3	3	3	3	3	2	-	-	-	-	2	-	3	-
C105.4	2	2	-	2	2	-	-	-	-	1	-	3	-
C105.5	1	2	-	-	1	-	-	-	-	1	-	2	-
Avg	2.4	2.6	3.0	2.8	1.8	-	-	-	-	1.6	2.0	2.8	
C107-GE3171/PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY													
C107.1	3	3	3	3	3	-	-	-	-	3	2	3	3
C107.2	3	3	3	3	3	-	-	-	-	3	2	3	-
C107.3	3	3	3	3	2	-	-	-	-	2	-	3	-
C107.4	3	2	-	2	2	-	-	-	-	1	-	3	-
C107.5	1	2	-	-	1	-	-	-	-	1	-	2	-
Avg	2.5	2.6	3.0	2.8	2.2	-	-	-	-	2.0	2.0	2.8	3.0
C108-BS31711/PHYSICS AND CHEMISTRY LABORATORY													
C108.1	3	-	1	-	-	2	-	-	-	-	2	-	-
C108.2	3	1	2	-	-	1	-	-	-	-	1	-	-
C108.3	3	2	1	1	-	-	-	-	-	-	-	-	-
C108.4	2	1	2	-	-	2	-	-	-	-	-	-	-
C108.5	2	1	2	-	1	2	-	-	-	-	1	-	-
Avg	2.6	1.3	1.6	1.0	1.0	1.8	1.3	-	-	-	1.3	-	-
C109-GE3172/ENGLISH LABORATORY													
C109.1	3	3	3	3	1	3	3	3	3	3	3	-	-
C109.2	3	3	3	3	1	3	3	3	3	3	3	-	-
C109.3	3	3	3	3	1	3	3	3	3	3	3	-	-
C109.4	3	3	3	3	1	3	3	3	3	3	3	-	-
C109.5	3	3	3	3	1	3	3	3	3	3	3	-	-
Avg	3	3	3	3	1	3	3	3	3	3	3	-	-
C110 –PROFESSIONAL ENGLISH - II													
C110.1	3	3	3	3	3	3	3	2	3	3	3	-	-
C110.2	3	3	3	3	3	3	3	2	3	3	3	-	-
C110.3	3	3	3	3	3	3	3	2	3	3	3	-	-
C110.4	3	3	3	3	2	3	3	2	3	3	3	-	-
C110.5	-	-	-	-	-	-	-	3	3	3	3	-	-
Avg	3	3	3	3	2.8	3	3	2.2	3	3	3	-	-
C111-MA3251/STATISTICS AND NUMERICAL METHODS													
C111.1	3	3	1	1	1	0	0	2	0	2	3	-	-
C111.2	3	3	1	1	1	0	0	2	0	2	3	-	-
C111.3	3	3	1	1	1	0	0	2	0	2	3	-	-
C111.4	3	3	1	1	1	0	0	2	0	2	3	-	-

C111.5	3	3	1	1	1	0	0	2	0	2	3	-	-
Avg	3	3	1	1	1	0	0	2	0	2	3	-	-
C112-PH3202/PHYSICS FOR ELECTRICAL ENGINEERING													
C112.1	3	2	1	-	-	1	-	-	-	-	-	-	-
C112.2	3	2	1	-	-	1	-	-	-	-	-	-	-
C112.3	3	2	1	-	-	1	-	-	-	-	-	-	-
C112.4	3	2	1	-	-	1	-	-	-	-	-	-	-
C112.5	3	2	1	-	-	1	-	-	-	-	-	-	-
Avg	3	2	1	-	-	1	-	-	-	-	-	-	-
C113-BE3255/BASIC CIVIL AND MECHANICAL ENGINEERING													
C113.1	2	-	-	-	1	-	2	1	2	-	1	-	-
C113.2	2	-	-	-	-	-	2	1	2	-	2	-	-
C113.3	2	-	-	-	-	-	2	2	2	-	2	-	-
C113.4	2	-	-	-	-	-	2	1	2	-	2	-	-
C113.5	2	-	-	-	-	-	2	1	2	-	2	-	-
Avg	2	-	-	-	-	-	2	1	2	-	1.8	-	-
C114-GE3251/ENGINEERING GRAPHICS													
C114.1	3	1	2	-	2	-	-	-	3	-	2	2	2
C114.2	3	1	2	-	2	-	-	-	3	-	2	2	2
C114.3	3	1	2	-	2	-	-	-	3	-	2	2	2
C114.4	3	1	2	-	2	-	-	-	3	-	2	2	2
C114.5	3	1	2	-	2	-	-	-	3	-	2	2	2
Avg	3	1	2	-	2	-	-	-	3	-	2	2	2
C115-CS3251-PROGRAMMING IN C													
C115.1	3	3	3	2	2	-	1	-	-	-	3	3	3
C115.2	3	3	3	3	2	-	1	-	-	-	3	3	3
C115.3	3	3	3	3	2	-	1	-	-	-	3	3	3
C115.4	3	3	3	3	2	-	1	-	-	-	3	3	3
C115.5	3	3	3	3	2	-	1	-	-	-	3	3	3
Avg	3	3	3	2.8	2	-	1	-	-	-	3	3	3
C117-GE3271/ENGINEERING PRACTICES LABORATORY													
C117.1	3	2	-	-	1	1	-	-	-	-	2	3	3
C117.2	3	2	-	-	1	1	-	-	-	-	2	3	3
C117.3	3	2	-	-	1	1	-	-	-	-	2	3	3
C117.4	3	2	-	-	1	1	-	-	-	-	2	3	3
C117.5	3	2	-	-	1	1	-	-	-	-	2	3	3
Avg	3	2	-	-	1	1	-	-	-	-	2	3	3
C118-CS3271 - PROGRAMMING IN C LABORATORY													
C118.1	3	3	3	3	3	-	1.5	3	-	-	3	3	2
C118.2	3	3	3	3	3	-	1.5	3	-	-	3	3	2
C118.3	3	3	3	3	3	-	1.5	3	-	-	3	3	2

C118.4	3	3	3	3	3	-	1.5	3	-	-	3	3	2
C118.5	3	3	3	3	3	-	1.5	3	-	-	3	3	2
Avg	3	3	3	3	3	-	1.5	3	-	-	3	3	2
C119-GE3272/ COMMUNICATION LABORATORY													
C119.1	2	3	3	3	1	3	3	3	3	3	3	-	-
C119.2	2	3	3	3	1	3	3	3	3	3	3	-	-
C119.3	2	2	3	3	1	3	3	3	3	3	3	-	-
C119.4	3	3	3	3	3	3	3	3	3	3	3	-	-
C119.5	3	3	3	3	3	3	3	3	3	3	3	-	-
Avg	2.4	2.8	3	3	1.8	3	3	3	3	3	3	-	-
C201-MA3354/DISCRETE MATHEMATICS													
C201.1	3	3	3	2	-	-	-	-	-	2	2	3	2
C201.2	3	2	3	3	-	-	-	-	-	2	2	2	2
C201.3	3	3	2	2	-	-	-	-	-	2	2	3	2
C201.4	3	3	3	3	-	-	-	-	-	2	2	2	2
C201.5	3	2	3	2	-	-	-	-	-	2	2	3	2
Avg	3	2.6	2.8	2.4	-	-	-	-	-	2	2	2.6	2
C202-CS3351/DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION													
C201.1	3	3	3	3	2	-	-	2	-	2	2	3	2
C201.2	3	3	2	3	2	-	-	2	-	2	2	2	2
C201.3	3	2	3	2	2	-	-	2	-	2	2	3	2
C201.4	3	3	3	3	2	-	-	3	-	2	2	2	2
C201.5	3	2	2	3	2	-	-	3	-	2	2	2	2
Avg	3	2.6	2.6	2.8	2	-	-	2.4	-	2	2	2.4	2
C203-CS3352/FOUNDATIONS OF DATA SCIENCE													
C203.1	3	3	3	2	-	2	2	-	-	3	2	3	2
C203.2	3	3	2	2	-	2	2	-	-	2	2	3	2
C203.3	2	2	3	2	-	2	2	-	-	3	2	3	2
C203.4	3	3	3	2	-	3	2	-	-	2	2	3	2
C203.5	2	2	2	2	-	3	2	-	-	2	2	3	2
Avg	2.6	2.6	2.6	2	-	2.4	2	-	-	-	2	3	2
C204-CS3301/DATA STRUCTURES													
C204.1	3	2	3	2	-	3	2	-	-	3	2	3	3
C204.2	3	3	2	3	-	3	2	-	-	3	2	3	2
C204.3	3	3	3	2	-	2	2	-	-	2	2	3	2
C204.4	3	3	3	3	-	3	2	-	-	2	2	3	3
C204.5	3	2	3	3	-	3	2	-	-	2	2	3	2
Avg	3	2.6	2.8	2.6	-	2.8	2	-	-	2.4	2	3	2.4
C205-CS3391/OBJECT ORIENTED PROGRAMMING													
C205.1	3	2	2	2	-	3	2	-	-	2	2	3	2
C205.2	3	3	2	2	-	2	3	-	-	2	2	3	2
C205.3	3	3	3	2	-	2	2	-	-	2	2	3	2

C205.4	3	3	2	2	-	3	3	-	-	2	2	3	2
C205.5	3	2	2	2	-	3	2	-	-	2	2	3	2
Avg	3	2.6	2.2	2	-	2.6	2.4	-	-	2	2	3	2
C206-CS3311/DATA STRUCTURES LABORATORY													
C206.1	3	2	3	2	3	-	-	3	2	-	2	3	2
C206.2	3	3	2	3	3	-	-	2	2	-	2	2	2
C206.3	3	3	3	2	3	-	-	3	2	-	2	3	2
C206.4	3	3	3	3	2	-	-	2	3	-	2	2	2
C206.5	3	2	3	3	2	-	-	3	3	-	2	3	2
Avg	3	2.6	2.8	2.6	2.6	-	-	2.6	2.4	-	2	2.6	2
C207-CS3381/OBJECT ORIENTED PROGRAMMING LABORATORY													
C207.1	3	2	2	2	2	-	-	2	2	-	2	3	2
C207.2	3	3	2	2	3	-	-	2	3	-	2	2	2
C207.3	3	2	3	2	2	-	-	2	3	-	2	2	2
C207.4	3	3	2	2	2	-	-	2	2	-	2	3	2
C207.5	3	2	2	2	2	-	-	2	2	-	2	3	2
Avg	3	2.4	2.2	2	2.2	-	-	2	2.4	-	2	2.6	2
C208-CS3361/DATA SCIENCE LABORATORY													
C208.1	3	3	3	2	3	-	-	3	2	-	2	3	2
C208.2	3	3	2	2	3	-	-	2	2	-	2	3	2
C208.3	2	2	3	2	2	-	-	2	2	-	2	3	2
C208.4	3	3	3	2	2	-	-	2	2	-	2	3	2
C208.5	2	2	2	2	2	-	-	2	2	-	2	3	2
Avg	2.6	2.6	2.6	2	2.4	-	-	2.2	2	-	2	3	2
C209-GE3361/PROFESSIONAL DEVELOPMENT													
C209.1	3	2	-	-	3	-	3	2	3	-	2	2	2
C209.2	2	3	-	-	2	-	3	3	3	-	3	2	2
C209.3	2	2	-	-	3	-	2	2	3	-	3	2	2
C209.4	2	2	-	-	2	-	2	3	3	-	2	2	2
C209.5	3	3	-	-	2	-	3	3	3	-	3	2	2
Avg	2.4	2.4	-	-	2.4	-	2.6	2.6	3	-	2.6	2	2
C211-CS3452/THEORY OF COMPUTATION													
C211.1	3	3	3	2	-	-	-	-	-	-	2	3	3
C211.2	3	2	2	3	-	-	-	-	-	-	2	3	3
C211.3	3	3	3	3	-	-	-	-	-	-	3	3	3
C211.4	3	3	2	2	-	-	-	-	-	-	2	3	3
C211.5	3	3	3	2	-	-	-	-	-	-	2	3	3
Avg	3	2.8	2.6	2.4	-	-	-	-	-	-	2.2	3	3
C212-CS3491/ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING													
C212.1	3	3	3	3	3	3	2	-	-	-	2	3	3
C212.2	3	3	3	2	3	2	3	-	-	-	2	3	2
C212.3	3	2	2	3	3	2	2	-	-	-	3	2	2
C212.4	3	3	3	2	3	3	3	-	-	-	2	3	2

C212.5	3	2	3	3	2	3	2	-	-	-	2	3	3
Avg	3	2.6	2.8	2.6	2.8	2.6	2.4	-	-	-	2.2	2.8	2.4
C213- CS3492/DATABASE MANAGEMENT SYSTEMS													
C213.1	3	3	2	2	2	-	-	-	-	-	2	2	2
C213.2	3	3	3	2	2	-	-	-	-	-	2	3	2
C213.3	3	3	3	2	2	-	-	-	-	-	3	2	2
C213.4	2	3	3	3	2	-	-	-	-	-	2	2	2
C213.5	3	3	2	2	2	-	-	-	-	-	2	2	2
Avg	2.8	3	2.6	2.2	2	-	-	-	-	-	2.2	2.2	2
C214-CS3401/ALGORITHMS													
C214.1	3	3	3	2	-	-	-	3	3	-	2	2	2
C214.2	2	3	3	2	-	-	-	2	3	-	3	2	2
C214.3	3	3	3	3	-	-	-	3	3	-	3	2	2
C214.4	3	2	3	3	-	-	-	3	2	-	2	2	2
C214.1	3	3	3	3	-	-	-	3	3	-	3	2	2
Avg	2.8	2.8	3	2.6	-	-	-	2.8	2.8	-	2.6	2	2
C215-CS3451/INTRODUCTION TO OPERATING SYSTEMS													
C215.1	3	3	3	3	-	-	3	-	-	-	2	3	2
C215.2	3	2	2	2	-	-	3	-	-	-	2	3	2
C215.3	2	2	3	3	-	-	3	-	-	-	3	3	2
C215.4	3	3	3	3	-	-	3	-	-	-	2	3	2
C215.1	3	3	3	2	-	-	3	-	-	-	2	3	2
Avg	2.8	2.6	2.8	2.6	-	-	3	-	-	-	2.2	3	2
C216-GE3451/ENVIRONMENTAL SCIENCES AND SUSTAINABILITY													
C216.1	2	3	-	2	-	2	3	-	2	-	2	2	2
C216.2	3	2	-	2	-	2	2	-	2	-	2	2	2
C216.3	2	3	-	2	-	3	3	-	2	-	3	2	2
C216.4	3	3	-	2	-	2	3	-	2	-	2	2	2
C216.5	2	2	-	2	-	3	3	-	2	-	2	2	2
Avg	2.4	2.6	-	2	-	2.4	2.8	-	2		2.2	2	2
C217- NX3453 NCC Credit Course Level 2* (AIR FORCE WING) NCC Credit Course Level - II													
C217.1	3	-	-	-	-	-	2	2	-	3	3		
C217.2	3	-	-	-	-	-	2	2	-	2	3		
C217.3	3	-	-	-	-	-	3	2	-	3	3		
C217.4	2	-	-	-	-	-	2	2	-	2	2		
C217.5	3	-	-	-	-	-	3	3	-	2	3		
Avg	2.8	-	-	-	-	-	2.4	2.2	-	2.4	2.8	0	0
C218-CS3461/OPERATING SYSTEMS LABORATORY													
C218.1	3	3	3	3	2	-	-	2	3	-	2	3	2
C218.2	3	3	3	2	2	-	-	3	3	-	2	2	2

C218.3	3	2	2	2	2	-	-	2	3	-	2	2	2
C218.4	2	3	2	2	2	-	-	3	3	-	3	3	2
C218.5	3	3	2	3	2	-	-	2	3	-	2	3	2
Avg	2.8	2.8	2.4	2.4	2	-	-	2.4	3	-	2.2	2.6	2
C219-CS3481 DATABASE MANAGEMENT SYSTEMS LABORATORY													
C219.1	2	3	3	3	2	-	-	2	3	-	2	2	2
C219.2	2	3	3	3	2	-	-	3	3	-	2	2	2
C219.1	3	3	3	3	2	-	-	3	3	-	3	3	2
C219.1	3	3	3	2	3	-	-	2	3	-	2	2	2
C219.1	3	3	3	3	2	-	-	3	3	-	2	3	2
Avg	2.6	3	3	2.8	2.2	-	-	2.6	3	-	2.2	2.4	2
C301-CS3591/COMPUTER NETWORKS													
C301.1	2	2	2	2	2	-	-	2	-	-	2	3	2
C301.2	3	2	3	3	2	-	-	2	-	-	2	2	3
C301.3	3	3	3	2	2	-	-	2	-	-	2	3	2
C301.4	3	3	3	3	2	-	-	2	-	-	2	2	2
C301.5	3	3	3	2	3	-	-	2	-	-	2	3	2
Avg	2.8	2.6	2.8	2.6	2.2			2	-	-	1.6	2.6	2.2
C302-CS3501/COMPILER DESIGN													
C302.1	3	3	2	2	2	-	-	-	-	-	2	2	2
C302.2	3	2	3	3	2	-	-	-	-	-	2	3	2
C302.3	3	2	2	2	2	-	-	-	-	-	2	3	2
C302.4	2	2	2	3	2	-	-	-	-	-	2	2	2
C302.5	3	3	2	3	3	-	-	-	-	-	3	2	3
Avg	2.8	2.4	2.2	2.6	2.2	-	-	-	-	-	2.2	2.4	2.2
C303-CB3491/CRYPTOGRAPHY AND CYBER SECURITY													
C303.1	3	2	2	2	2	2	2	-	-	-	2	2	2
C303.2	3	3	2	3	2	2	2	-	-	-	2	2	2
C303.3	3	3	2	3	2	2	2	-	-	-	2	2	3
C303.4	3	2	2	3	2	2	2	-	-	-	2	3	2
C303.5	3	3	3	3	3	3	2	-	-	-	3	3	3
Avg	2.8	2.6	2.2	2.8	2.2	2.2	2	-	-	-	2.2	2.4	2.4
C304-CS3551/DISTRIBUTED COMPUTING													
C304.1	3	2	2	2	-	-	-	-	-	-	2	2	2
C304.2	3	2	2	3	-	-	-	-	-	-	2	2	2
C304.3	2	2	2	3	-	-	-	-	-	-	2	2	3
C304.4	2	2	2	3	-	-	-	-	-	-	2	2	3
C304.5	3	2	3	3	-	-	-	-	-	-	3	2	3
Avg	2.6	2	2.2	2.8	-	-	-	-	-	-	2.2	2	2.6

C305-CCS334/BIG DATA ANALYTICS													
C305.1	3	2	2	2	2	2	-	-	-	-	2	2	2
C305.2	3	3	3	2	2	3	-	-	-	-	2	2	2
C305.3	3	3	3	2	2	2	-	-	-	-	2	2	3
C305.4	3	2	3	2	2	3	-	-	-	-	2	2	3
C305.5	3	3	3	3	3	3	-	-	-	-	3	2	2
Avg	3	2.6	2.8	2.2	2.2	2.6	-	-	-	-	2.2	2	2.4
C306-CCS375/WEB TECHNOLOGIES													
C306.1	3	3	2	2	2	2	-	-	-	-	2	2	2
C306.1	3	2	3	2	3	2	-	-	-	-	2	2	2
C306.1	2	3	3	2	2	2	-	-	-	-	2	2	3
C306.1	3	2	3	2	2	2	-	-	-	-	3	2	3
C306.1	3	3	2	3	2	2	-	-	-	-	3	3	3
Avg	2.8	2.6	2.6	2.2	2.2	2	-	-	-	-	2.4	2.2	2.6
C307-MX3084/DISASTER RISK REDUCTION AND MANAGEMENT													
C307.1	-	-	-	-	-	2	3	-	-	-	3	2	2
C307.2	-	-	-	-	-	2	3	-	-	-	3	2	2
C307.3	-	-	-	-	-	2	3	-	-	-	3	2	2
C307.4	-	-	-	-	-	2	3	-	-	-	2	2	2
C307.5	-	-	-	-	-	3	3	-	-	-	3	2	2
Avg	-	-	-	-	-	2.2	3	-	-	-	2.8	2	2
C308-CCS356/OBJECT ORIENTED SOFTWARE ENGINEERING													
C308.1	2	2	2	2	2	-	-	2	-	3	2	3	2
C308.2	2	3	2	2	2	-	-	2	-	3	2	3	2
C308.3	2	2	2	3	2	-	-	2	-	3	3	3	2
C308.4	2	2	2	3	2	-	-	2	-	2	3	2	2
C308.5	2	2	3	3	2	-	-	2	-	3	3	2	3
Avg	2	2.2	2.2	2.6	2	-	-	2	-	2.8	2.6	2.8	2.2
C309-CS3691/EMBEDDED SYSTEMS AND IOT													
C309.1	2	2	2	2	3	2	-	-	-	-	2	2	2
C309.2	2	2	3	3	3	3	-	-	-	-	2	2	2
C309.3	2	2	3	3	3	3	-	-	-	-	2	2	2
C309.4	2	2	3	3	3	2	-	-	-	-	2	2	3
C309.5	3	2	3	3	3	3	-	-	-	-	2	3	2
Avg	2	2	2	2	3	2	-	-	-	-	2	2	2
C310- OCE351/ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT													
C310.1	2	2	-	-	-	3	3	-	-	-	3	3	2
C310.2	2	3	-	-	-	3	2	-	-	-	2	3	2
C310.3	2	2	-	-	-	3	2	-	-	-	3	3	2
C310.4	3	2	-	-	-	2	3	-	-	-	3	2	2
C310.5	2	2	-	-	-	3	2	-	-	-	2	3	2
Avg	2.2	2.2	-	-	-	2.8	2.	-	-	-	2.	2.	2

							4				6	8	
C311-CCS336/CLOUD SERVICES MANAGEMENT													
C311.1	2	2	-	-	3	3	3	3	3	-	3	3	2
C311.2	2	3	-	-	3	2	3	3	2	-	2	3	2
C311.3	2	2	-	-	2	3	2	2	3	-	3	3	2
C311.4	3	2	-	-	3	2	2	3	2	-	3	2	2
C311.5	2	2	-	-	3	3	3	3	2	-	2	3	2
Avg	-	-	-	-	2.8	2.6	2.6	2.8	2.4	-	2.6	2.8	2
C312-CCS354/NETWORK SECURITY													
C312.1	3	3	3	-	2	3	3	3	3	-	3	3	2
C312.2	2	2	3	-	3	2	3	3	2	-	2	2	2
C312.3	2	3	2	-	2	2	2	2	2	-	3	3	2
C312.4	2	2	2	-	3	2	3	3	3	-	2	3	2
C312.5	3	2	3	-	3	3	3	3	2	-	2	2	2
Avg	2.4	2.4	2.6	-	2.6	2.4	2.8	2.8	2.4	-	2.4	2.6	2
C313-CCW332/DIGITAL MARKETING													
C313.1	-	-	-	-	3	3	3	3	3	3	3	3	2
C313.2	-	-	-	-	3	3	3	3	2	2	2	3	2
C313.3	-	-	-	-	2	2	2	2	3	2	3	3	2
C313.4	-	-	-	-	3	3	3	2	3	3	3	2	2
C313.5	-	-	-	-	3	2	3	3	2	3	2	3	2
Avg	-	-	-	-	2.8	2.6	2.8	2.6	2.6	2.6	2.6	2.8	2
C314-CCS340/CYBER SECURITY													
C314.1	3	3	3	-	3	3	3	3	3	3	3	3	2
C314.2	3	2	3	-	3	2	2	3	2	2	2	2	2
C314.3	2	3	3	-	2	3	2	2	3	2	3	2	2
C314.4	2	2	2	-	3	2	3	3	3	2	3	3	2
C314.5	2	3	3	-	3	2	2	3	2	3	2	3	2
Avg	2.4	2.6	2.8	-	2.8	2.4	2.4	2.8	2.6	2.4	2.6	2.6	2
C401-MX3089/INDUSTRIAL SAFETY													
C401.1	3	-	-	-	-	-	2	-	-	3	2		
C401.2	2	-	-	-	-	-	2	-	-	2	2		
C401.3	3	-	-	-	-	-	2	-	-	3	3		
C401.4	2	-	-	-	-	-	2	-	-	2	2		
C401.5	3	-	-	-	-	-	3	-	-	2	3		
Avg	2.6	-	-	-	-	-	2.2	-	-	2.4	2.4	0	0
C402-GE3791/HUMAN VALUES AND ETHICS													
C402.1	-	-	-	-	-	3	3	-	-	3	3	3	2
C402.2	-	-	-	-	-	3	3	-	-	2	2	2	2
C402.3	-	-	-	-	-	2	3	-	-	3	2	3	2

C402.4	-	-	-	-	-	3	3	-	-	3	3	2	2
C402.5	-	-	-	-	-	2	3	-	-	2	2	3	2
Avg	-	-	-	-	-	2.6	3	-	-	2.6	2.4	2.6	2
C403-GE3751/ PRINCIPLES OF MANAGEMENT													
C403.1	-	-	-	-	-	3	2	-	-	3	3	3	2
C403.2	-	-	-	-	-	2	3	-	-	2	2	3	2
C403.3	-	-	-	-	-	3	3	-	-	3	2	3	2
C403.4	-	-	-	-	-	3	2	-	-	3	3	3	2
C403.5	-	-	-	-	-	2	3	-	-	3	2	3	2
Avg	-	-	-	-	-	2.6	2.6	-	-	2.8	2.4	3	2
C404-OAE351/AVIATION MANAGEMENT													
C404.1	-	-	-	-	-	3	2	-	-	3	3	3	2
C404.2	-	-	-	-	-	3	3	-	-	3	2	3	2
C404.3	-	-	-	-	-	2	3	-	-	3	2	3	2
C404.4	-	-	-	-	-	3	2	-	-	3	2	2	2
C404.5	-	-	-	-	-	2	3	-	-	3	2	3	2
Avg	-	-	-	-	-	2.6	2.6	-	-	3	2.2	2.8	2
C405-CME365/RENEWABLE ENERGY TECHNOLOGIES													
C405.1	-	-	-	-	-	3	3	-	-	3	3	3	2
C405.2	-	-	-	-	-	3	3	-	-	3	2	2	2
C405.3	-	-	-	-	-	3	3	-	-	3	2	3	2
C405.4	-	-	-	-	-	3	3	-	-	3	2	2	2
C405.5	-	-	-	-	-	2	2	-	-	3	2	2	2
Avg	-	-	-	-	-	2.8	2.8	-	-	3	2.2	2.4	2
C406-CRA332/ DRONE TECHNOLOGIES													
C406.1	-	-	-	-	-	3	3	-	-	3	3	2	2
C406.2	-	-	-	-	-	3	3	-	-	2	2	2	2
C406.3	-	-	-	-	-	3	3	-	-	3	2	3	2
C406.4	-	-	-	-	-	3	3	-	-	2	3	3	2
C406.5	-	-	-	-	-	3	3	-	-	3	2	2	2
Avg	-	-	-	-	-	3	3	-	-	2.6	2.4	2.4	2
C407- CS3711/SUMMER INTERNSHIP													
C407.1	-	-	-	-	-	3	3	-	-	3	3	2	2
C407.2	-	-	-	-	-	3	3	-	-	2	2	2	2
C407.3	-	-	-	-	-	3	3	-	-	3	2	3	2
C407.4	-	-	-	-	-	3	3	-	-	2	3	3	2
C407.5	-	-	-	-	-	3	3	-	-	3	2	2	2
Avg	-	-	-	-	-	3	3	-	-	2.6	2.4	2.4	2
C408- CS3811 / PROJECT WORK /INTERNSHIP													
C408.1	3	3	3	3	2	2	2	2	3	2	2	3	2

C408.2	3	3	3	3	2	2	2	2	3	2	2	3	3
C408.3	3	3	3	3	2	2	2	2	3	2	2	3	2
C408.4	3	3	3	3	2	2	2	2	3	2	2	3	3
C408.5	3	3	3	3	2	2	2	2	3	2	2	3	2
Avg	3	3	3	3	2	2	2	2	3	2	2	3	2. 4