Meerut Institute of Engineering and Technology, Meerut

List of Subjects and Concerned Course teachers # MCA (Batch : 2021-23 from I year to final year)

S. No.	Year (session) of Study	Sem	Subject Code	Subject Name	Subject Short Name	Theory / Lab	Course Teacher Name
1	2021-22	I	KCA101	Fundamental of Computers & Emerging Technologies		Theory	Dr KS Mishra
2		I	KCA102	Problem Solving using C		Theory	Mr. Rooban Agarwal
3		I	KCA103	Principles of Management & Communication		Theory	Ms Jyoti Singh
4		I	KCA104	Discrete Mathematics		Theory	Dr Renu Naresh
5		I	KCA105	Computer Organization & Architecture		Theory	Ms Soni Panwar
6		I	KCA151	Problem Solving using C Lab		Lab	Mr Rooban Agrawal
7		I	KCA152	Computer Organization & Architecture Lab		Lab	Ms Soni Panwar
8		I	KCA153	Professional Communication Lab		Lab	Ms Aqsa Ansari
9	2021-22	II	KCA201	Theory of Automata & Formal Languages		Theory	Mr Prince Gupta
10		II	KCA202	Object Oriented Programming		Theory	Ms Soni Panwar
11		II	KCA203	Operating Systems		Theory	Ms Deepali Gupta
12		II	KCA204	Database Management Systems		Theory	Dr KS Mishra
13		II	KCA205	Data Structures & Analysis of Algorithms		Theory	Dr Md Anwar
14		II	KCA251	Object Oriented Programming Lab		Lab	Ms Soni Panwar
15		II	KCA252	DBMS Lab		Lab	Dr KS Mishra
16		II	KCA253	Data Structures & Analysis of Algorithms Lab		Lab	MS Deepali Gupta
17	2022-23	III	KCA301	Artificial Intelligence		Theory	Dr SK Soni
18		III	KCA302	Software Engineering		Theory	Ms Deepali Gupta
19		III	KCA303	Computer Network		Theory	Ms Aditi Bharadwaj
20		III	KCA351	Artificial Intelligence Lab		Lab	Dr SK Soni
21		III	KCA352	Software Engineering Lab		Lab	Ms Deepali Gupta
22		III	KCA014	Cloud Computing		Theory	Dr Md Anwar
23		III	KCA021	Web Technology	Elective Subjects, not opted by all students.	Theory	Mr Prince Gupta
24		III	KCA024	Software Testing & Quality Assurance		Theory	Ms Soni Panwar
25	2022-23	IV	KCA034	Data Analytics		Theory	Dr KS Mishra
26		IV	KCA035	Software Quality Engineering		Theory	MS Soni Panwar
27		IV	KCA043	Internet Of Things	Elective Subjects, not opted by all students.	Theory	MS Deepali Gupta
28		IV	KCA045	Distributed Database System		Theory	Mr. Rooban Agrawal
29		IV	KCA052	Computer Graphics and Animation		Theory	MS Aditi Bhardwal
30		IV	KCA054	Machine Learning		Theory	Dr SK Soni

Statements of Course Outcomes (COs) and Mapping with Program Outcomes (POs) and Program Specific Outcomes (PSOs) : Dept. of MCA, Batch: 2021-23
(Session-wise; First Year to Final Year) BKL # K1 – Remember, K2 – Understand, K3 – Apply, K4 – Analyze, K5 – Evaluate, K6 – Create

S. No.	Sub Code	Sem	COx	Statement of Course Outcomes (COs) Upon completion of topic concerned, students will be able to :	Kx (Blooms Knowledge Level)	PO 1 Computational Knowledge	PO 2 Problem Analysis	PO 3 Design/development of solutions	PO 4 Conduct investigations of complex Computing problems	PO 5 Modern tool usage	PO 6 Professionl Ethics:	PO 7 Life-long Learning	PO 8 Project management and finance	PO 9 Communication Efficacy	PO 10 Societal and Environmental Concern	PO 11 Individual and Team Work	PO 12 Innovation and Entrepreneurship	PSO 1	PSO 2	PSO 3
1	KCA101	I	CO-1	Demonstrate the knowledge of the basic structure, components, features and generations of computers .	K2	3	3	2			2							1		
			CO-2	Describe the concept of computer languages, language translators and construct algorithms to solve problems using programming concepts.	K3	3	3	3			2							1		
			CO-3	Compare and contrast features, functioning & types of operating system and computer networks.	K4	3	3	2										0	2	
			CO-4	Demonstrate architecture, functioning & services of the Internet and basics of multimedia.	K2	3	2	2			2							0		
			CO-5	Illustrate the emerging trends and technologies in the field of Information Technology.	K2	3	2	3			2			2	2			2		
			KCA101		**K3**	**3.00**	**2.60**	**2.40**			**2.00**			**0.40**	**0.40**			**0.80**	**0.40**	
2	KCA102	I	CO-1	Construct flowchart, write algorithm for solving basic problems and write C programs that incorporate use of variables, operators and expressions along with data types	K2,K3	3	1	2		2										
			CO-2	Write simple programs using basic elements like control statements, loops and iterations and functions.	K2,K4	3	1	2		2										
			CO-3	Write advanced programs using the concept of Arrays, Pointers and Strings.	K3	3	1	2		2			3	3				1		
			CO-4	Write advanced programs using the concepts of structures, union and enumerated data types.	K2,K3	3	1	2		2								1		
			CO-5	Apply pre-processor directives, basic file handling and graphics operations in advanced programming.	K1,K2	3	1	2		2								1		
			KCA102		**K3**	**3.00**	**1.00**	**2.00**		**2.00**			**0.60**	**0.60**				**0.60**		
3	KCA103	I	CO-1	To Describe primary features, processes and principles of management.	K2	3	1	1												
			CO-2	To Explain functions of management in terms of planning, decision making and organizing.	K4	1	2	1												
			CO-3	To Illustrate key factors of leadership skill in directing and controlling business resources and processes.	K6	2	1	2												
			CO-4	To Exhibit adequate verbal and non-verbal communication skills	K3	1	2	3	1											
			CO-5	To Demonstrate effective discussion, presentation and writing skills.	K5	3														
			KCA103		**K3**	**2.00**	**1.50**	**1.75**	**1.00**											
4	KCA104	I	CO-1	To apply concepts related to sets, relations and functions, to study certain interesting discrete structures of importance in computer applications	K1, K2	3	3	2										1	1	
			CO-2	To describe basic properties of Posets and lattices, and also apply Boolean algebras related concept in design and analysis of digital circuits.	K2, K3	3	3	2										1	2	
			CO-3	Apply mathematical arguments using logical connectives and quantifiers to check the validity of an argument through truth tables and propositional and predicate logic.	K2	3	3	2										1	1	
			CO-4	Identify and prove properties of Algebraic Structure like Groups, Abelian Groups, Subgroups, Cosets, Homomorphism, Isomorphism, Permutation Groups, Ring and Field.	K1, K3, K4	3	3	2			2	2						2	2	
			CO-5	Formulate and solve recurrence and recursive functions and apply Combinatorics to solve basic problems in discrete mathematics.	K2, K3	3	2	2			2	2						1	1	
			KCA104		**K3**	**3.00**	**2.80**	**2.00**			**0.40**	**0.40**						**1.2**	**1.4**	
5	KCA105	I	CO-1	To understand functional units of digital system and explain how arithmetic and logical operations are performed by computers.	K2,K3	3	1	2		2						3		1		1
			CO-2	To understand and describe the operations of control unit and write sequence of instructions for carrying out simple operations using various addressing modes	K2,K4	3	1	2		2						3		1		
			CO-3	To understand and design various types of memory and its organization	K3	3	1	2		2			3	3		3				
			CO-4	To understand and describe the various modes in which IO devices communicate with CPU and memory	K2,K3	3	1	2		2						3				
			CO-5	To understand andlist the criteria for classification of parallel computer and describe various architectural schemes .	K1,K2	3	1	2		2						3				
			KCA105		**K3**	**3.00**	**1.00**	**2.00**		**2.00**			**3.00**	**3.00**		**3.00**		**1.00**		**0.20**

S.No	Course Code	Sem	CO	Description	K	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
6	KCA151	I	CO-1	Write, compile, debug and execute programs in a C programming environment.	K3	3	1											1	3	
			CO-2	Write programs that incorporate use of variables, operators and expressions along with data types.	K3	2	3	1										1	2	
			CO-3	Write programs for solving problems involving use of decision control structures and loops.	K3	3	2											2	2	
			CO-4	Write programs that involve the use of arrays, structures and user defined functions.	K3	2	1													
			CO-5	Write programs using graphics and file handling operations.	K3	2														
			KCA151		**K3**	**2.40**	**1.75**											**1.33**	**2.33**	
7	KCA152	I	CO-1	Design and verify combinational circuits (adder, code converter, decoder, multiplexer) using basic gates.	K3	3	3	1		2									1	1
			CO-2	Design and verify various flip-flops.	K2	2	2	2		2								2	2	1
			CO-3	Design I/O system and ALU.	K2	2	1	2		2										0
			CO-4	Demonstrate combinational circuit using simulator	K3	3	1	1		2	2	1								1
			CO-5	Design the control unit.	K1	2	2	1		2	1	2							1	0
			KCA152		**K3**	**2.40**	**1.80**	**1.40**		**2.00**	**1.50**	**1.50**						**2.00**	**1.33**	**0.60**
8	KCA153	I	CO-1	To develop the ability to work as a team member as an integral activity in the workplace.	K6	1		3							3					
			CO-2	To increase confidence in their ability to read, comprehend, organize, and retain written information. Improve reading fluency.	K3									2						
			CO-3	To write coherent speech outlines that demonstrate their ability to use organizational formats with a specific purpose Deliver effective speeches that are consistent with and appropriate for the audience and purpose.	K3						1				3					
			CO-4	To develop proper listening skills; articulate and enunciate words and sentences clearly and efficiently.	K2								1		3	2				
			CO-5	To show confidence and clarity in public speaking projects; be schooled in preparation and research skills for oral presentations.	K3					2						3				
			KCA153		**K3**	**0.20**		**0.60**		**0.40**	**0.20**		**0.20**	**2.00**	**2.67**		**2.50**			
9	KCA301	III	CO-1	To Define the meaning of intelligence and study various intelligent agents.	K1	3	3	1	1	1									2	2
			CO-2	To Understand, analyze and apply AI searching algorithms in different problem domains.	K4	2	2	3	3										1	1
			CO-3	To Study and analyze various models for knowledge representation.	K3	2	2	1	3	3										1
			CO-4	To Understand the basic concepts of machine learning to analyze and implement widely used learning methods and algorithms.	K6	2	2	3	1	1								1		1
			CO-5	To Understand the concept of pattern recognition and evaluate various classification and clustering techniques	K5	2	1	3	3									2	1	
			KCA301		**K3**	**2.20**	**2.00**	**2.20**	**2.20**	**1.67**								**1.50**	**1.33**	**1.25**
10	KCA302	III	CO-1	To explain various software characteristics and analyze different software Development Models.	K2	3	2											2	1	
			CO-2	To demonstrate the contents of a SRS and apply basic software quality assurance practices to ensu	K2	2	2	2										1	2	
			CO-3	To compare and contrast various methods for software design.	K3	2	2											1	1	
			CO-4	To formulate testing strategy for software systems, employ techniques such as unit testing, Test driv	K3	1	1	2												
			CO-5	To manage software development process independently as well as in teams and make use of vario	K2	1	1													
			KCA302		**K3**	**1.80**	**1.60**	**0.40**										**1.33**	**1.33**	
11	KCA303	III	CO-1	Describe communication models TCP/IP, ISO-OSI model, network topologies along with communica	K2	3	3	2	1											
			CO-2	Apply knowledge of error detection, correction and learn concepts of flow control along with error con	K3	3	2	2	1											
			CO-3	Classify various IP addressing techniques, subnetting along with network routing protocols and algor	K4	3	2	1	1											
			CO-4	Understand various transport layer protocols and their design considerations along with congestion c	K2	3	2	2	2		2									
			CO-5	Understand applications-layer protocols and elementary standards of cryptography and network secu	K2	3	3	1	1		2									
			KCA303		**K3**	**3.00**	**2.40**	**1.60**	**1.20**		**0.40**									
12	KCA014	III	CO-1	To understand the concepts of Cloud Computing, key technologies, strengths and limitations of clou	K3	3	3	1	2											
			CO-2	To develop the ability to understand and use the architecture to compute and storage cloud, service	K2	3	2	2	1											
			CO-3	To understand the application in cloud computing.	K2	3	2	2	2											
			CO-4	To learn the key and enabling technologies that help in the development of cloud.	K3	3	2	2	2											
			CO-5	To explain the core issues of cloud computing such as resource management and security.	K1	3	1	1	1											
			KCA014		**K3**	**3.00**	**2.00**	**1.60**	**1.60**											
			CO-1	To Study and understand AI tools such as Python / MATLAB.	K2	3	3	2										2		

No	Code	Sem	CO	Description	K	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
13	KCA351	III	CO-2	To Apply AI tools to analyze and solve common AI problems.	K4	3	3	2												
			CO-3	To Implement and compare various AI searching algorithms.	K6	3	3	2												
			CO-4	To Implement various machine learning algorithms.	K6	3	3	2										2		
			CO-5	To Implement various classification and clustering techniques.	K6	3	2	2												
			KCA351		**K3**	**3.00**	**2.80**	**2.00**										**2.00**		
14	KCA352	III	CO-1	To identify ambiguities, inconsistencies and incompleteness from a requirements specification and s	K3	3	2													
			CO-2	To identify different actors and use cases from a given problem statement and draw use case diagra	K2	3	1	2												
			CO-3	To draw a class diagram after identifying classes and association among them.	K2	3	2	1												
			CO-4	To graphically represent various UML diagrams and associations among them and identify the logica	K3	3	2	2			2	2								
			CO-5	To able to use modern engineering tools for specification, design, implementation and testing.	K1	3	1	1			2	2								
			KCA352		**K3**	**3.00**	**1.60**	**1.50**			**0.40**	**0.40**								
15	KCA201	II	CO-1	To define various types of automata for different classes of formal languages and explain their worki	K2	2	3													
			CO-2	To state and prove key properties of formal languages and automata.	K3	1	2				1									
			CO-3	To construct appropriate formal notations (such as grammars, acceptors, transducers and regular ex	K2	2	2													
			CO-4	To convert among equivalent notations for formal languages.	K1	3														
			CO-5	To explain the significance of the Universal Turing machine, ChurchTuring thesis and concept of Un	K2	3					2									
			KCA201		**K3**	**2.20**	**2.33**				**1.50**									
16	KCA202	II	CO-1	: To understand and list the significance and key features of object oriented programming	K2	3	3						2	3				1		1
			CO-2	:To understand and construct basic structural, behavioral and architectural models using object oriented software engineering approach.	K2	3	3	2					2	2				2		
			CO-3	To understand and integrate object oriented modeling techniques for analysis and design of a system.	K3	3	3	2					1	2				1	1	
			CO-4	To understand and use the basic features of data abstraction and encapsulation in java programs.	K3	2	2	1										1		
			CO-5	To understand and use the advanced features such as Inheritance, polymorphism and virtual functio	K2	1	1	1										2		1
			KCA202		**K3**	**2.40**	**2.40**	**2.00**					**1.67**	**2.33**				**1.33**	**1.00**	**1.00**
17	KCA203	II	CO-1	To explain main components, services, types and structure of Operating Systems.	K3	3	3	2	1											
			CO-2	To apply the various algorithms and techniques to handle the various concurrency control issues. K	K2	2	2	1	2											
			CO-3	To compare and apply various CPU scheduling algorithms for process execution.	K2	2	2	2	1											
			CO-4	To identify occurrence of deadlock and describe ways to handle it.	K3	3	2	2	1											
			CO-5	To explain and apply various memory, I/O and disk management techniques.	K1	3	1	1	3											
			KCA203		**K3**	**2.60**	**2.00**	**1.60**	**1.60**											
18	KCA204	II	CO-1	Describe the features of a database system and its application and compare various types of data models.	K2	3	2	3	2									1		
			CO-2	Construct an ER Model for a given problem and transform it into a relation database schema, relational algebra	K6	3	2	3	3									1	1	
			CO-3	Formulate solution to a query problem using SQL Commands, tuple calculus and domain calculus.	K6	3	2	3	3	2								2	1	
			CO-4	Explain the need of normalization and normalize a given relation to the desired normal form.	K3	3	2	2	3	3								1		
			CO-5	Explain different approaches of transaction processing and concurrency control.	K2	3	2	3	2	2								1		2
			KCA204		**K4**	**3.00**	**2.00**	**2.80**	**2.60**	**2.33**								**1.20**	**1.00**	**2.00**
19	KCA205	II	CO-1	To explain the concept of data structure, abstract data types, algorithms, analysis of algorithms and basic data organization schemes such as arrays and linked lists.	K2	3	3	1	2	3	1	3	1	1	1	1				
			CO-2	To describe the applications of stacks and queues and implement various operations on them using arrays and linked lists.	K3	3	3	2	3	3	3	1	1	1	2	3				
			CO-3	To describe the properties of graphs and trees and implement various operations such as searching and traversal on them.	K2	3	3	2	2	1	1	2	2	2	1	1				

#	Code	Sem	CO	Description	K	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
			CO-4	To compare incremental and divide-and-conquer approaches of designing algorithms for problems such as sorting and searching.	K1	3	2	2	3	2	2	2	1	1	2	2			
			CO-5	To apply and analyze various design approaches such as Divide-and-Conquer, greedy and dynamic for problem solving .	K2	3	3	3	2	2	3	1	1	1	1	1			
			KCA205		**K3**	**3.00**	**2.80**	**2.00**	**2.40**	**2.20**	**2.00**	**1.80**	**1.20**	**1.20**	**1.40**	**1.60**			
20	KCA251	II	CO-1	Use the Concept of Data Abstraction and Encapsulation in JAVA programs.	K3	3											2		
			CO-2	Use the concept of Inheritance and Abstraction in JAVA programs.	K3	3	2										1	1	
			CO-3	Design and Develop JAVA program using the concept such as polymorphism, virtual function, exception handling and template.	K3	3	2										1	1	
			CO-4	Develop the GUI application using SWING	K3	3	2	2			2	2					1		
			CO-5	Apply object oriented techniques to analyze, design and develop a complete solution for a given problem.	K3,K4	3					2	2					1		1
			KCA251		**K3**	**3.00**	**2.00**	**2.00**			**2.00**	**2.00**					**1.20**	**1.00**	**1.00**
21	KCA252	II	CO-1	To install database & creating Entity Relationship Diagram.	K3	3	2	3			2	2						1	1
			CO-2	To write SQL commands to query a database & converting into normal forms.	K3	3	2	2			3	2					1	2	1
			CO-3	To write PL/SQL programs for implementing stored functions & procedures.	K3	3	2	3			3	3							
			CO-4	To write PL/SQL programs for implementing cursors & triggers.	K3	3	2	2			2	2					2		1
			CO-5	To write PL/SQL programs for implementing packages, backing& recovering files.	K3,K4	3	3	2			2	2					1	2	2
			KCA252		**K3**	**3.00**	**2**	**2**			**2**	**2**					**1**	**2**	**1**
22	KCA253	II	CO-1	To write and execute programs to implement various searching and sorting algorithms.	K2	3	3												
			CO-2	To write and execute programs to implement various operations on two-dimensional arrays.	K3	2	2	2	2		2								
			CO-3	To implement various operations of Stacks and Queues using arrarys data structures.	K2	2	3	2											
			CO-4	To implement variuos operations of Stacks and Queues using linked list data structures.	K1	3	2												
			CO-5	To implement graph algorithm to solve the problem of minimum spanning tree	K2	3					2								
			KCA 253		**K3**	**2.60**	**2.50**	**2.00**	**2.00**		**2.00**								

Meerut Institute of Engineering and Technology, Meerut

Compiled Record of Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs)

Dept of MCA : Batch 2021-23

S. No.	Session	Sem	Subject Code	Subject Name	PO1 Computational Knowledge	PO2 Problem Analysis	PO3 Design/development of solutions	PO4 Conduct investigations of complex Computing problems	PO5 Modern tool usage	PO6 Professionl Ethics:	PO7 Life-long Learning	PO8 Project management and finance	PO9 Communication Efficacy	PO10 Societal and Environmental Concern	PO11 Individual and Team Work	PO12 Innovation and Entrepreneurship	PSO 1	PSO 2	PSO 3
1	2021-22	I	KCA101	Fundamental of Computers & Emerging Technologies	3.00	2.60	2.40	0.00	0.00	2.00	0.00	0.00	0.40	0.40	0.00	0.00	0.80	0.40	0.00
2		I	KCA102	Problem Solving using C	3.00	1.00	2.00	0.00	2.00	0.00	0.00	0.60	0.60	0.00	0.00	0.00	0.60	0.00	0.00
3		I	KCA103	Principles of Management & Communication	2.00	1.50	1.75	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4		I	KCA104	Discrete Mathematics	3.00	2.80	2.00	0.00	0.00	0.40	0.40	0.00	0.00	0.00	0.00	0.00	1.20	1.40	0.00
5		I	KCA105	Computer Organization & Architecture	3.00	1.00	2.00	0.00	2.00	0.00	0.00	3.00	3.00	0.00	0.00	3.00	1.00	0.00	0.20
6		I	KCA151	Problem Solving using C Lab	2.40	1.75	0.00	0.00	0.00	0.00	0.00	1.33	2.33	0.00	0.00	0.00	0.00	0.00	0.00
7		I	KCA152	Computer Organization & Architecture Lab	2.40	1.80	1.40	0.00	2.00	1.50	1.50	0.00	0.00	0.00	0.00	0.00	2.00	1.33	0.60
8		I	KCA153	Professional Communication Lab	0.20	0.00	0.60	0.00	0.40	0.20	0.00	0.20	2.00	2.67	0.00	2.50	0.00	0.00	0.00
9	2021-22	II	KCA201	Theory of Automata & Formal Languages	2.20	2.33	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10		II	KCA202	Object Oriented Programming	2.40	2.40	2.00	0.00	0.00	0.00	0.00	1.67	2.33	0.00	0.00	0.00	1.33	1.00	1.00
11		II	KCA203	Operating Systems	2.60	2.00	1.60	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12		II	KCA204	Database Management Systems	3.00	2.00	2.80	2.60	2.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.00	2.00
13		II	KCA205	Data Structures & Analysis of Algorithms	3.00	2.80	2.00	2.40	2.20	2.00	1.80	1.20	1.20	1.40	1.60	0.00	0.00	0.00	0.00
14		II	KCA251	Object Oriented Programming Lab	3.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	1.20	1.00	1.00
15		II	KCA252	DBMS Lab	3.00	2.20	2.40	0.00	0.00	2.40	2.20	0.00	0.00	0.00	0.00	0.00	1.33	1.67	1.25
16		II	KCA253	Data Structures & Analysis of Algorithms Lab	2.60	2.50	2.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	2022-23	III	KCA301	Artificial Intelligence	2.20	2.00	2.20	2.20	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	1.33	1.25
18		III	KCA302	Software Engineering	1.80	1.60	0.40	0.00	0.00	0.00	0.00	1.33	1.33	0.00	0.00	0.00	0.00	0.00	0.00
19		III	KCA303	Computer Network	3.00	2.40	1.60	1.20	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20		III	KCA351	Artificial Intelligence Lab	3.00	2.80	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
21		III	KCA352	Software Engineering Lab	3.00	1.60	1.50	0.00	0.00	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22		III	KCA014	Cloud Computing	3.00	2.00	1.60	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Overall				2.58	1.96	1.65	0.66	0.57	0.65	0.40	0.42	0.60	0.20	0.07	0.25	0.64	0.42	0.33