

Meerut Institute of Engineering and Technology, Meerut

Statements of Course Outcomes (COs) and Mapping with Program Outcomes (POs) : B Tech - I Year : 2023-24

BKL # K1 – Remember, K2 – Understand, K3 – Apply, K4 – Analyze, K5 – Evaluate, K6 – Create

[illegible]

3	BAS102/ 202 Engg Chemistry	CO-1	Understand atomic and molecular structure, chemistry of advanced Materials and green chemistry.	K2	3										2	
		CO-2	Apply spectroscopic techniques and stereochemistry to identify the compounds, elements etc.	K3	3	2										
		CO-3	Apply concepts of electrochemistry, batteries, corrosion and chemistry of engineering Materials like cement.	K3	3	2									2	
		CO-4	Apply concepts of impurities & hardness of water and boiler troubles used in industry & to analyse coal for its calorific values.	K3	3	2	2			2	2				2	
		CO-5	Understand polymers, polymerization, polymer blends, polymer composites and organometallic compounds.	K2	3					2	2				2	
		BAS102/ 202				3.00	2.00	2.00			2.00	2.00				2.00
		4	BAS152/ 252 Engg Chemistry Lab	CO-1	Perform experiments with different analytical instruments for chemical properties.	K3	2					2	2		2	
CO-2	Compare molecular / system properties such as surface tension, viscosity with water.			K3	2											
CO-3	Measure alkalinity, hardness and chloride content of water.			K2	3	2	2			2	2		2		2	
CO-4	Determine the iron content and available chlorine in given sample.			K3	2						2					
CO-5	Know the fundamental concepts of the preparation of phenol formaldehyde & urea formaldehyde resin			K2	2	2				2	2				2	
BAS152/ 252					2.20	2.00	2.00			2.00	2.00		2.00		2.00	
		CO-1	Apply the concept of matrices for solving linear simultaneous equations	K3	3	3	3								3	
		CO-2	Apply the concept of differentiation in successive derivatives,Lebnitz theorem,partial and total derivative.	K3	3	3	3								3	

5	BAS103 Engg Maths-I	CO-3	Apply partial differentiation for evaluating extreme values, expansion of function and Jacobian, approximation of errors.	K3	3	3	3									3
		CO-4	Apply the methods of multiple integral and concept of beta and gamma functions for finding area, volume and mass	K3	3	3	3									3
		CO-5	Apply the concept of vector for evaluating directional derivatives, line, surface and volume integrals	K3	3	3	3									3
		BAS103				3.00	3.00	3.00								3.00
6	BCS101/ 201 Prog for Problem Solving	CO-1	Translate the algorithms to programs & perform its execution in C language.	K3	3											3
		CO-2	Implement conditional branching, instructions along with operators.	K3	3	3	3									3
		CO-3	Use looping control instructions, arrays and structures to develop programs.	K3	3	3	3									3
		CO-4	Decompose a problem into functions and synthesize a complete program.	K3	3	3	3									3
		CO-5	Utilize pointer, file handling, dynamic memory allocation to solve problems.	K3	3	3	3									3
		BCS101/ 201				3.00	3.00	3.00								3.00
7	BCS151/ 251 Prog for Problem Solving Lab	CO-1	Solve simple problems based on arithmetic expressions using operators.	K3	2	2	2									
		CO-2	Implement conditional branching instructions to develop programs.	K3	3	3	3									
		CO-3	Use looping control instructions and functions to solve complex problems.	K3	3	3	3									3
		CO-4	Design solutions by using arrays and structures to develop programs.	K3	3	3	3									3
		CO-5	Utilize pointer, file handling, dynamic memory allocation to solve problems.	K3	3	3	3									3
		BCS151/ 251				2.80	2.80	2.80								3.00

[illegible]

	Fundam	CO-5	Describe the fundamentals of communication technologies.	K2	2								2			
BEC101/ 201					2.60		2.00						2.00		2.00	
11	BEC151/ 251 Basic Electronics Engg Lab	CO-1	Demonstrate the active & Passive components, PCBs & lab instruments.	K2	3							2	2		2	
		CO-2	Test the conditions of truth tables for logic gates.	K2	3	3						2	2		2	
		CO-3	Examine the functioning of diode application circuits.	K2	3	3	3						2	2		2
		CO-4	Demonstrate the functioning of OP-AMP based circuits.	K2	3	3	3						2	2		2
		CO-5	Conclude the characteristics of different semiconductor devices with their applications.	K2	3	3	3						2	2		2
		BEC151/ 251					3.00	3.00	3.00						2.00	2.00
12	BME 101 / 201 Fun. of Mechanical Engg.	CO-1	Apply the concept of force resolution and stress and strain to solve basic problems.	K3	3	2				2					2	
		CO-2	Understand the construction and working of internal combustion engines, electric vehicle and hybrid vehicles.	K2	3	2				2						2
		CO-3	Explain the construction and working of refrigerator, heat pump and air conditioner.	K2	3	2				2						2
		CO-4	Understand fluid properties, conservation laws and hydraulic machinery used in real life.	K2	3	2				2						2
		CO-5	Understand the working principle of different measuring instrument and mechatronics with their advantages, scope and Industrial application.	K2	3	2			2	2						2
		BME101/ 201					3.00	2.00			2.00	2.00				
	Lab	CO-1	Use various engineering materials, tools, machines and measuring equipments.	K3	2				2		2	2			2	
		CO-2	Perform machine operations in lathe and CNC machine.	K3	3			2	2		2	3			2	

16	BAS105/ BAS205 Soft Skills	CO-1	Understand the concept of sentence formation and usefulness of enriched vocabulary.	K2				2		2				3		3
		CO-2	Apply the skills of active listening and speaking on professional grounds.	K3						2		2		3		3
		CO-3	Read as well as write clear and well structured official and business documents.	K3			2			2			2	3		3
		CO-4	Acquire the skills necessary to deliver impactful presentations.	K3											2	3
		CO-5	Equip themselves with work-place skills necessary to be a successful professional.	K3									2		3	3
		BAS105					2.00	2.00		2.00		2.00	2.00	3.00	2.50	3.00
17	BAS155/ 255 English Language Lab	CO-1	Make use of conversational skills for effective group talks and interviews.	K3									2	2		2
		CO-2	Develop communication and presentation skills for technical papers/project reports/proposals in seminars/conferences/workshops/theme presentations.	K2										2		2
		CO-3	Build conversational skills for public/individual speaking /conferencing/role play/JAM /argumentation.	K2										2		2
		CO-4	Make use of comprehension skills based on reading and listening practical's on model audio.	K3										2		2
		CO-5	Execution social skills for a given work station.	K3										2		2
		BAS155/ 255											2.00	2.00		2.00
		CO-1	Understand basic concepts related to ecosystem, EIA and the need of sustainable development.	K2						2	3	3				

18	BAS104/ BAS204 Environment and Ecology	CO-2	Understand about natural resources and impacts of human actions on natural resources.	K2						2	3	2				
		CO-3	Develop critical thinking for environmental pollution and environmental protection.	K4						2	3	2				
		CO-4	Understand various current environmental issues and concerns of National and global importance.	K2						2	3	2	2			
		CO-5	Develop sensitive attitude to adopt sustainability as a practice in life, society and industry.	K3						2	3	3	2			2
		BAS104/ 204								2.00	3.00	2.40	2.00			2.00