

Cummins College of Engineering for Women, Nagpur

Program: B.Tech First Semester (All Branches)

COURSE	MATHEMATICS – I		
COURSE CODE	BES1-1T	COURSE ABBREVIATION	M-I
SEMESTER	FIRST	BRANCH	All Branches
COURSE CREDITS	04	EXAMINATION SCHEME	Theory University (TU)

COURSE OUTCOMES

After the completion of the Course, Students will be able to....

Course Outcomes		Blooms Level	PO
BES1-1.1	<i>Analyze real world scenarios to recognize when derivatives or integrals are appropriate, formulate problems about the scenarios, creatively model these scenarios (using technology, if appropriate) to solve the problems using multiple Approaches, judge if the results are reasonable, and then interpret and clearly communicate the results.</i>	Level 1, 4	PO-1,2
BES1-1.2	<i>Appreciate ODE and system of ODEs concepts that are encountered in the real world, understand and be able to communicate the underlying mathematics involved to help another person gain insight into the situation.</i>	Level 1, 2,	PO-1,2
BES1-1.3	<i>Apply knowledge of mathematics, physics, and modern computing tools to scientific and engineering problems.</i>	Level 1, 3	PO-1,2
BES1-1.4	<i>Develop an ability to identify, formulate and/or solve real world problems.</i>	Level 2	PO-1,2
BES1-1.5	<i>Understand the impact of scientific and engineering solutions in a global and societal context.</i>	Level 1,2	PO-1,2

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Program:- B. Tech First Year (All Branches)

COURSE	Applied Physics		
COURSE CODE	BES1- 2T	COURSE ABBREVIATION	AP
SEMESTER	FIRST	BRANCH	ALL
COURSE CREDITS	4	EXAMINATION SCHEME	Theory University (TU)

COURSE OUTCOMES

After the completion of Course, Students will be able to.....

Course Outcomes		Blooms Level	PO
BES1T2.1	<i>Apply concepts in interference and diffraction to solve relevant numerical problems and to relate to relevant engineering applications</i>	1,2,3	PO 1,2,12
BES1T2.2	<i>Learn the basic concepts of dual nature of matter and wave packet and apply them to analyze various relevant phenomena and to solve related numerical problems</i>	1,2,3,4	PO 1,2,12
BES1T2.3	<i>Recall the basic concepts of crystal structure and apply them in solving numerical problems based on them and in relating to applications for determination of crystal structure</i>	1,2,3	PO 1,2,12
BES1T2.4	<i>Relate the basic idea of total internal reflection to the propagation of light in an optical fiber and make use of the fiber concepts to solve numerical problems and relate to applications in engineering</i>	1,2,4	PO 1,2,12
BES1T2.5	<i>Find how to extend the basic concepts of motion of charged particles in electric magnetic fields to solve numerical problems and to relate to applications in electron optic devices and CRO</i>	1,2,3,	PO 1,2,12

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Program:- B. Tech First Semester (All branches)

COURSE	Energy and Environment		
COURSE CODE	BESI-3T	COURSE ABBREVIATION	EE
SEMESTER	First	BRANCH	B. Tech (All branches)
COURSE CREDITS	03	EXAMINATION SCHEME	Theory University (TU)

COURSE OUTCOMES

After the completion of Course, Students will be able to.....

Course Outcomes		Blooms Level	PO
BESI-3T.1	<i>To obtain</i> the knowledge of solid and gaseous fuels and their Calorific Value determination	Level 1, 2	PO 1
BESI-3T.2	<i>To recognize</i> the type of liquid fuels and their uses in IC engines.	Level 1, 2	PO 1,2
BESI-3T.3	<i>To apply</i> the knowledge about the use of alternative sources of energy & utilize solid waste as energy source	Level 2,3	PO 6,7
BESI-3T.4	<i>To analyze</i> the impacts of Industrial pollution and its control.	Level 3,4	PO 2,7
BESI-3T.5	<i>To develop</i> innovative ideas for use of advanced materials in sustainable development	Level 4,5	PO 3, 7

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Program:- B. Tech in First Year (All Branches)

COURSE	Communication Skills		
COURSE CODE	BSE1-4T	COURSE ABBREVIATION	CS
SEMESTER	FIRST	BRANCH	All Branches
COURSE CREDITS	02	EXAMINATION SCHEME	Theory University (TU)

COURSE OUTCOMES

After the completion of Course, Students will be able to.....

Course Outcomes		Blooms Level	PO
BSE1-4T.1	<i>To Understand the importance of communication and overcome barriers of communication.</i>	Level 2	PO10
BSE1-4T.2	<i>Acquire public speaking skills and handle group situation professionally.</i>	Level 3	PO 10
BSE1-4T.3	<i>To comprehend passages and compose paragraph.</i>	Level 3	PO 10
BSE1-4T.4	<i>To construct error free and meaningful sentence in English.</i>	Level 3	PO 10

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Program: - B. Tech First Semester (All Branches)

COURSE	Engineering Graphics (Theory)		
COURSE CODE	BSE1-5T	COURSE ABBREVIATION	EG
SEMESTER	First	BRANCH	All Branches
COURSE CREDITS	03	EXAMINATION SCHEME	Theory University (TU)

COURSE OUTCOMES

After the completion of Course, Students will be able to.....

Course Outcomes		Blooms Level	PO
BSE1-5T.1	<i>Understand</i> basic knowledge of Engineering Graphics such as instruments, lines etc, and construct various engineering curves and basic of orthographic projection through drawing the projection of point and line	Level 1, 2	PO1, PO3, PO10, PO12
BSE1-5T.2	<i>Understand</i> different types of projection of planes (2D) & solid (3D) and will be able to draw different views of planes and solids	Level 1, 2	PO1, PO3, PO10, PO12
BSE1-5T.3	<i>Understand</i> concept of sectioning and development of lateral surfaces of solid and able to represent it.	Level 1, 2	PO1, PO3, PO10, PO12
BSE1-5T.4	<i>Apply</i> visualization skill to draw a simple isometric projection views from given orthographic views precisely using drawing instruments	Level 2,3	PO1, PO3, PO10, PO12

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Program:- B. Tech 1st Semester (All Branches)

COURSE	Basics of Civil and Mechanical Engineering		
COURSE CODE	BSE 1-6T	COURSE ABBREVIATION	BCME
SEMESTER	FIRST	BRANCH	All Branches
COURSE CREDITS	00	EXAMINATION SCHEME	Continual Assessment (Audit Course)

COURSE OUTCOMES

After the completion of Course, Students will be able to.....

Course Outcomes		Blooms Level	PO
BSE 1-6T.1	<i>Understand</i> role of Civil Engineering specializations in development of nation and Society.	Level 1, 2	PO 6,8,12
BSE 1-6T.2	<i>Explore</i> the Civil Engineering aspects of different ancient monuments and recently constructed marvelous monuments	Level 1, 2	PO 6,12
BSE 1-6T.3	<i>Understand</i> basic manufacturing processes and working principle of different mechanisms with its application.	Level 1, 2	PO 1
BSE 1-6T.4	<i>Analyze</i> the various renewable and non-renewable energy sources.	Level 2	PO 1, 12
BSE 1-6T.5	<i>Explore</i> various types of road vehicles and their specifications.	Level 1, 2	PO 1,12

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Program:- B. Tech First Year (All Branches)

COURSE	Applied Physics Lab		
COURSE CODE	BES1- 2P	COURSE ABBREVIATION	AP
SEMESTER	FIRST	BRANCH	All Branches
COURSE CREDITS	1.5	EXAMINATION SCHEME	Practical University (TU)

COURSE OUTCOMES

After the completion of Course, Students will be able to.....

Course Outcomes -Practical		Blooms Level	PO
BES1-2P.1	<i>Experiment with spectrometer to understand optical phenomenon such as interference and diffraction</i>	2	2, 12
BES1-2P.2	<i>Get Acquaint of CRO and its use for engineering Applications</i>	3	12

Cummins College of Engineering for Women, Nagpur

Program:- B. Tech (All branches)

COURSE	Energy and Environment Lab		
COURSE CODE	BESI-3P	COURSE ABBREVIATION	EE
SEMESTER	First	BRANCH	B. Tech (All branches)
COURSE CREDITS	01	EXAMINATION SCHEME	Practical University (PU)

COURSE OUTCOMES

After the completion of Course, Students will be able to.....

Course Outcomes		Blooms Level	PO
BESI-3P.1	<i>To gain the practical knowledge of handling chemicals.</i>	Level 1, 2	PO 1
BESI-3P.2	<i>Analyzing a broad foundation in energy and environment that stresses scientific reasoning and analytical problem solving with a molecular perspective</i>	Level 1, 2	PO 1,2
BESI-3P.3	<i>Experimental techniques using modern instrumentation</i>	Level 2,3	PO 5

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Program:- B. Tech in First Year (All Branches)

COURSE	Communication Skills Lab		
COURSE CODE	BSE1-4P	COURSE ABBREVIATION	CS
SEMESTER	FIRST	BRANCH	FIRST Year
COURSE CREDITS	01	EXAMINATION SCHEME	PRACTICAL University (PU)

COURSE OUTCOMES

After the completion of the Course, Students will be able to.....

Course Outcomes		Blooms Level	PO
BSE1-4P.1	<i>Understand</i> the importance of listening and overcome listening barriers of communication.	Level 2	PO10
BSE1-4P.2	<i>Enhance and apply</i> the knowledge of comprehending skills and speaking skills.	Level 3	PO 10
BSE1-4P.3	<i>Apply</i> the knowledge of effective presentations and handle group situations professionally.	Level 3	PO 10
BSE1-4P.4	<i>To apply figurative language in their formal as well as informal communication.</i>	Level 3	PO 10

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Program: - B. Tech First Semester

COURSE	Engineering Graphics Lab		
COURSE CODE	BSE1-5P	COURSE ABBREVIATION	EG
SEMESTER	First Sem	BRANCH	All Branches
COURSE CREDITS	02	EXAMINATION SCHEME	Practical University (TP)

COURSE OUTCOMES

After the completion of Course, Students will be able to.....

Course Outcomes		Blooms Level	PO
BSE1-5P.1	<i>Draw the fundamental engineering objects using basic rules and able to construct lines, simple geometries. Construct the various engineering curves using the drawing instruments.</i>	Level 1, 2	PO1, PO3, PO10, PO12
BSE1-5P.2	<i>Draw two dimensional and three dimensional objects, precisely using drawing instruments.</i>	Level 1, 2	PO1, PO3, PO10, PO12
BSE1-5P.3	<i>Draw the development of lateral surfaces for cut section of geometrical solids precisely using drawing instruments.</i>	Level 1, 2	PO1, PO3, PO10, PO12
BSE1-5P.4	<i>Draw simple isometric projection from given orthographic views precisely using drawing instruments.</i>	Level 2,3	PO1, PO3, PO10, PO12