

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

B.E. in Marine Engineering

Scheme of Teaching and Examinations 2022

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2023-24)

III SEMESTER													
Sl. No	Course	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination				Credits
					Theory Lecture	Tutorial	Practical / Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P	S					
1	PCC	BMR301	Basic Ship Knowledge and Watch keeping	TD-PSB	3	0	0		03	50	50	100	3
2	IPCC	BMR302	Manufacturing Processes	TD: PSB	3	0	2		03	50	50	100	4
3	IPCC	BMR303	Material Science	TD: PSB	3	0	2		03	50	50	100	4
4	PCC	BMR304	Thermodynamics	TD: PSB	2	2	0		03	50	50	100	3
5	PCCL	BMEL305	Introduction to Modeling and Design for Manufacturing	TD: PSB	0	0	2		03	50	50	100	1
6	ESC	BMR306x	ESC/ETC/PLC	TD: PSB:	3	0	0		03	50	50	100	3
7	UHV	BSCK307	Social Connect and Responsibility	Any Department	0	0	2		01	100	---	100	1
8	AEC/ SEC	BMR358x	Ability Enhancement Course/Skill Enhancement Course - III		If the course is a Theory				01	50	50	100	1
					1	0	0						
					If a course is a laboratory				02				
					0	0	2						
9	MC	BNSK359	National Service Scheme (NSS)	NSS coordinator	0	0	2			100	---	100	0
		BPEK359	Physical Education (PE) (Sports and Athletics)	Physical Education Director									
		BYOK359	Yoga	Yoga Teacher									
									Total	550	350	900	20

<p>PCC: Professional Core Course, PCCL: Professional Core Course laboratory, UHV: Universal Human Value Course, MC: Mandatory Course (Non-credit), AEC: Ability Enhancement Course, SEC: Skill Enhancement Course, L: Lecture, T: Tutorial, P: Practical S= SDA: Skill Development Activity, CIE: Continuous Internal Evaluation, SEE: Semester End Evaluation. K : This letter in the course code indicates common to all the stream of engineering. ESC: Engineering Science Course, ETC: Emerging Technology Course, PLC: Programming Language Course</p>			
<p>Engineering Science Course (ESC/ETC/PLC) [L-T-P::3-0-0]</p>			
BMR306A	Non Traditional Machining	BMR306C	Nanomaterials and Applications
BMR306B	Introduction to Robotics	BMR306D	Fuel Cell Technology
<p>Ability Enhancement Course – III</p>			
BMR358A	Spreadsheet for Engineers (0-0-2-0)	BMR358C	Chartering (1-0-0-0)
BMR358B	Microcontrollers (0-0-2-0)	BMR358D	Tools in Scientific Computing [0-0-2-0]
<p>Professional Core Course (IPCC): Refers to Professional Core Course Theory Integrated with practicals of the same course. Credit for IPCC can be 04 and its Teaching– Learning hours (L : T : P) can be considered as (3 : 0 : 2) or (2 : 2 : 2). The theory part of the IPCC shall be evaluated both by CIE and SEE. The practical part shall be evaluated by only CIE (no SEE). However, questions from the practical part of IPCC shall be included in the SEE question paper. For more details, the regulation governing the Degree of Bachelor of Engineering /Technology (B.E./B.Tech.) 2022-23 may please be referred.</p>			
<p>National Service Scheme /Physical Education/Yoga: All students have to register for any one of the courses namely National Service Scheme (NSS), Physical Education (PE)(Sports and Athletics), and Yoga(YOG) with the concerned coordinator of the course during the first week of III semesters. Activities shall be carried out between III semester to the VI semester (for 4 semesters). Successful completion of the registered course and requisite CIE score is mandatory for the award of the degree. The events shall be appropriately scheduled by the colleges and the same shall be reflected in the calendar prepared for the NSS, PE, and Yoga activities. These courses shall not be considered for vertical progression as well as for the calculation of SGPA and CGPA, but completion of the course is mandatory for the award of degree.</p>			

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IV SEMESTER

Sl. No	Course and Course Code		Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination				Credits
					Theory Lecture	Tutorial	Practical / Drawing	Self - Study	Duration in hours	CIE Marks	SEE Marks	Total Marks	
1	PCC	BMR401	Mechanics of Materials		2	2	0		03	50	50	100	3
2	IPCC	BMR402	Marine Electrical Technology		3	0	2		03	50	50	100	4
3	IPCC	BMR403	Fluid Mechanics & Machinery		2	2	2		03	50	50	100	4
4	PCCL	BMR404	Mechanical Measurements & Metrology laboratory		0	0	2		03	50	50	100	1
5	ESC	BMR405x	ESC/ETC/PLC		3	0	0		03	50	50	100	3
6	AEC/ SEC	BXX456x	Ability Enhancement Course/Skill Enhancement Course- IV	TD and PSB: Concerned department	If the course is Theory				01	50	50	100	1
					1	0	0						
					If the course is a lab				02				
0	0	2											
4	BSC	BBOK407	Biology For Engineers	TD / PSB: BT, CHE,	3	0	0		03	50	50	100	3
7	UHV	BUHK408	Universal human values course	Any Department	1	0	0		01	50	50	100	1
9	MC	BNSK459	National Service Scheme (NSS)	NSS coordinator	0	0	2		100	---	100	0	
		BPEK459	Physical Education (PE) (Sports and Athletics)	Physical Education Director									
		BYOK459	Yoga	Yoga Teacher									
Total									500	400	900	20	

PCC: Professional Core Course, **PCCL:** Professional Core Course laboratory, **UHV:** Universal Human Value Course, **MC:** Mandatory Course (Non-credit), **AEC:** Ability Enhancement Course, **SEC:** Skill Enhancement Course, **L:** Lecture, **T:** Tutorial, **P:** Practical **S= SDA:** Skill Development Activity, **CIE:** Continuous Internal Evaluation, **SEE:** Semester End Evaluation. **K :** This letter in the course code indicates common to all the stream of engineering.

Engineering Science Course (ESC/ETC/PLC) [L-T-P::3-0-0]			
BMR405A	Marine Environmental Protection	BMR405C	Smart Materials & Systems
BMR405B	Mechatronics (SKS)	BMR405D	Hydraulics and Pneumatics
Ability Enhancement Course / Skill Enhancement Course - IV			
BMR456A	Advanced Programming in Python (0-0-2-0)	BMR456C	Maritime law (1-0-0-0)
BMR456B	PLC and SCADA (1-0-0-0)	BMR456D	Fundamentals of Virtual Reality (1-0-0-0)
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