

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI**  
**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**SCHEME OF TEACHING AND EXAMINATION 2017-18**  
**III Semester B.E. Marine Engineering**

Sl no	Subject code	Title	Teaching Hours/week		Examination				L-T-P-C
			Theory	Practical/ Drawing	Duration	Theory/ practical marks	IA Marks	Total Marks	
1	17MAT31	Engineering Mathematics – III (core)	04		03	60	40	100	3-2-0-4
2	17MR32	Material Science & Metallurgy (core)	04		03	60	40	100	4-0-0-4
3	17MR33	Basic Thermodynamics(core)	04		03	60	40	100	3-2-0-4
4	17MR34	Mechanics of materials(core)	04		03	60	40	100	3-2-0-4
5	17MR35	Elementary Navigation Seamanship and survival at sea(core)	04		03	60	40	100	4-0-0-4
6	17MR36	Measurement and Metrology(foundation course)	04		03	60	40	100	4-0-0-4
7	17MRL37	Measurements and Metrology Lab		1L+2P	03	60	40	100	1-0-2-2
8	17MRL38	Machine Shop and Foundry Lab		1L+2P	03	60	40	100	1-0-2-2
Total			24	6	24	640	160	800	28

1. Core subject: This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.
2. Foundation Course: The courses based upon the content that leads to Knowledge enhancement.

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**SCHEME OF TEACHING AND EXAMINATION 2017-18**  
 IV Semester B.E. Marine Engineering

Sl no	Subject code	Title	Teaching Hours/week		Examination				L-T-P-C
			Theory	Practical/ Drawing	Duration	Theory/practical marks	IA Marks	Total Marks	
1	17MAT41	Engineering Mathematics – IV (Core)	04		03	60	40	100	3-2-0-4
2	17MR42	Theory of machines(core)	04		03	60	40	100	3-2-0-4
3	17MR43	Applied Thermodynamics (core)	04		03	60	40	100	3-2-0-4
4	17MR44	Ship Structure and Construction(core)	04		03	60	40	100	4-0-0-4
5	17MR45	Marine Heat Engine and Air conditioning(core)	04		03	60	40	100	3-2-0-4
6	17MR46	Fluid Mechanics(foundation course)	04		03	60	40	100	3-2-0-4
7	17MRL47	Material Testing Lab		1L+2P	03	60	40	100	1-0-2-2
8	17MRL48	Computer Aided Marine Engineering Drawing		1L+2P	03	60	40	100	1-0-2-2
Total			24	6	24	640	160	800	28

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**SCHEME OF TEACHING AND EXAMINATION 2017-18**  
V Semester B.E. Marine Engineering

Sl no	Subject code	Title	Teaching Hours/week		Examination				L-T-P-C
			Theory	Practical/ Drawing	Duration	Theory/practical marks	IA Marks	Total Marks	
1	17MR51	Naval architecture (Core)	04		03	60	40	100	4-0-0-4
2	17MR52	Marine Internal Combustion Engine-I(core)	04		03	60	40	100	4-0-0-4
3	17MR53	Marine auxiliary machines-I (core)	04		03	60	40	100	4-0-0-4
4	17MR54	Turbo Machines(core)	04		03	60	40	100	4-0-0-4
5	17MR55x	Professional elective-1	03		03	60	40	100	3-0-0-3
6	17MR56x	Open elective-1	03		03	60	40	100	3-0-0-3
7	17MRL57	Marine engine Lab		1L+2P	03	60	40	100	1-0-2-2
8	17MRL58	Fluid mechanics and machines lab		1L+2P	03	60	40	100	1-0-2-2
Total			22	6	24	640	160	800	26

Professional elective		Open elective	
17MR551	Design of Machine Elements	17MR561	Operation Research
17MR552	Energy Engineering	17MR562	Energy and environment
17MR553	Marine Manufacturing Technology	17MR563	Management Information System
17MR554	Steam Engineering	17MR564	Micro and Smart Technology

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2. Professional elective: Elective relevant to chosen specialization /branch
3. Open elective: Electives from other technical and /or emerging subject area

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**SCHEME OF TEACHING AND EXAMINATION 2017-18**  
 VI Semester B.E. Marine Engineering

Sl no	Subject code	Title	Teaching Hours/week		Examination				L-T-P-C
			Theory	Practical/ Drawing	Duration	Theory/practical marks	IA Marks	Total Marks	
1	17MR61	Marine Electrical Technology(core)	04		03	60	40	100	4-0-0-4
2	17MR62	Marine Internal Combustion Engine-II(core)	04		03	60	40	100	4-0-0-4
3	17MR63	Marine auxiliary machines-II(core)	04		03	60	40	100	4-0-0-4
4	17MR64	Heat Transfer(core)	04		03	60	40	100	3-2-0-4
5	17MR65x	Professional elective-2	03		03	60	40	100	3-0-0-3
6	17MR66x	Open elective -2	03		03	60	40	100	3-0-0-3
7	17MRL67	Heat transfer lab		1L+2P	03	60	40	100	1-0-2-2
8	17MRL68	Marine Electrical lab		1L+2P	03	60	40	100	1-0-2-2
Total			22	6	24	640	160	800	26

Professional elective		Open elective	
17MR651	Ship fire prevention and control	17MR661	Automation and Industrial Robotics
17MR652	Mechanics of composite material	17MR662	Project management
17MR653	Special Duty Vessels	17MR663	Non Traditional machining
17MR654	Control Engineering	17MR664	Management and Entrepreneurship

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2. Professional elective: Elective relevant to chosen specialization /branch
3. Open elective: Electives from other technical and /or emerging subject area

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 VII Semester B.E. Marine Engineering

Sl no	Subject code	Title	Teaching Hours/week		Examination				L-T-P-C
			Theory	Practical/ Drawing	Duration	Theory/practical marks	IA Marks	Total Marks	
1	17MR71	Marine Boilers(Core)	04		03	60	40	100	4-0-0-4
2	17MR72	Mechanical Vibrations(core)	04		03	60	40	100	4-0-0-4
3	17MR73	Ship operations and Management (core)	04		03	60	40	100	4-0-0-4
4	17MR74x	Professional elective-3	03		03	60	40	100	3-0-0-3
5	17MR75x	Professional elective-4	03		03	60	40	100	3-0-0-3
6	17MRL76	Vibration Lab		1L+2P	03	60	40	100	1-0-2-2
7	17MRL77	Simulation lab		1L+2P	03	60	40	100	1-0-2-2
8	17MRP78	Project Phase-I + seminar				--	100	100	0-0-2-2
Total			18	6	21	560	240	800	24

Professional elective		Professional elective	
17MR741	Stability of ships	17MR751	IMO and Maritime conventions
17MR742	Tribology	17MR752	Hydraulics and pneumatics
17MR743	Ship Safety and Fire Prevention	17MR753	Shipping Trade
17MR744	Advanced Marine Technology	17MR754	Marine Machinery and system Design

1. Core subject: This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.

- Professional elective: Elective relevant to chosen specialization /branch
- Project Phase-I + seminar:Literature survey, problem identification, objectives and methodology. Submission of synopsis and seminar.

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 VIII Semester B.E. Marine Engineering

Sl no	Subject code	Title	Teaching Hours/week		Examination				L-T-P-C
			Theory	Practical/ Drawing	Duration	Theory/practical marks	IA Marks	Total Marks	
1	17MR81	Engine Room Management(Core)	04		03	60	40	100	4-0-0-4
2	17MR82	Control Engineering and automation (core)	04		03	60	40	100	3-2-0-4
3	17MR83x	Professional elective-5	03		03	60	40	100	4-0-0-3
4	17MR84	Internship/professional practice	Industry oriented		03	50	50	100	0-0-3-2
5	17MRP85	Project work phase-II		06	03	100	100	200	0-0-6-6
6	17MRS86	Seminar		04	--	--	100	100	0-0-0-1
Total			11	10	15	390	310	700	20

<b>Professional elective</b>	
17MR831	Transport and logistics management
17MR832	Ship recycling
17MR833	Marine Engine Practice
17MR834	Marine Corrosion and Prevention

- Core subject: This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.
- Professional elective: Elective relevant to chosen specialization /branch
- Internship/professional practice: To be carried out between 6<sup>th</sup> and 7<sup>th</sup> semester vacation or 7<sup>th</sup> and 8<sup>th</sup> semester vacation period