

**Branch Code: OE7**  
**M.Tech. in OCEAN STRUCTURE**  
**2021 Batch**

**Semester 1**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE5050	Ocean Structures and Materials	3	0	0	0	6	9
2	OE5030	Wave Hydrodynamics	3	0	0	1	6	10
3	OE5070	Statics and Dynamics of Marine Vehicles	3	0	0	1	6	10
4	OE6200	Design of Offshore Structures	3	1	0	0	6	10
5	OE5200	Dynamics of Ocean Structures	3	0	0	0	6	9
6	OE5110	Experimental Methods and measurements	3	0	0	2	6	11
<b>Total Credits :</b>								<b>59</b>

**Semester 2**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE5400	Port and Harbour Structures	3	0	0	0	6	9
2	OE5500	FEM Applied to Ocean Engineering	3	0	0	0	6	9
3	DPE1	Department Elective 1	3	0	0	0	6	9
4	DPE2	Department Elective 2	3	0	0	0	6	9
5	DPE3	Department Elective 3	3	0	0	0	6	9
6	OE5020	Design Project **	0	0	0	0	2	0
<b>Total Credits :</b>								<b>45</b>

**SUMMER**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE6900+	Thesis Project *	0	0	0	0	20	20
2	OE5020	Design Project	0	0	0	0	2	4
<b>Total Credits</b>								<b>24</b>

**Semester 3**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE5012	Deep Sea Technology	3	0	0	0	6	9
2	DEP4	Department Elective 4	3	0	0	0	6	9
3	OE6900#	Thesis Project *	0	0	0	0	20	20
<b>Total Credits :</b>								<b>38</b>

*\* Project (OE6900+) grade will be assigned in 4<sup>th</sup> semester*

**Semester 4**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE6900	Project	0	0	0	0	40	40
<b>Total Credits :</b>								<b>40</b>

Semester	I	II	Summer	III	IV	Total
<b>Credits</b>	<b>59</b>	<b>45</b>	<b>24</b>	<b>38</b>	<b>40</b>	<b>206</b>

\* Credits for OE 6900 will be awarded at the end of IV semester

\*\* Credits for OE5020 will be awarded at the end of Summer term.

## LIST OF ELECTIVES

OE5230	Foundations of Offshore structures	3	1	0	0	6	10
OE5300	Dynamics of Floating Bodies	3	0	0	0	6	9
OE5320	Nonlinear Problem in Ocean Engineering	3	0	0	0	6	9
OE5330	Advanced Marine Structures	3	0	0	0	6	9
OE5450	Numerical Techniques in Ocean Hydrodynamics	3	0	3	0	6	12
OE5800	Coastal Engineering	3	0	0	0	6	9
PE6090	HSE Management in Petroleum and Offshore Engineering	3	0	0	0	6	9
OE6002	Installation of Offshore Structures	3	0	0	0	6	9
OE6004	Numerical Modeling of Offshore Structures	2	0	0	3	4	9
OE6001	Materials and Fabrication of Offshore Structures	3	1	0	0	6	10
OE6005	Reliability of Offshore Structures	3	0	0	0	6	9
OE5970	Structural Health monitoring	3	0	0	0	6	9
OE5410	Advanced steel design	3	0	0	0	6	9
OE6008	Design, Construction and Operation of LNG Carriers and Terminals	4	0	0	0	8	12
OE6060	Stochastic structural dynamics applied to ocean engineering	3	0	0	0	6	9
<b>ELECTIVES - OTHER DEPARTMENTS</b>							
AM6570	Flow Induced Vibration	3	0	0	0	6	9
CE5720	Stability of Structures	3	0	0	0	6	9
MM5320	Corrosion Engineering	3	0	0	0	6	9
AS5820	Analysis of Plates and Shells	3	0	0	0	6	9
AS5860	Composite Structures	3	0	0	0	6	9
CE5630	Advanced theory and design of Concrete structures	3	1	0	0	6	10

**Branch Code: OE5**  
**M.Tech. in OCEAN TECHNOLOGY**  
**2021 Batch**

**Semester 1**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE5010	Oceanography	3	0	0	1	6	10
2	OE5030	Wave Hydrodynamics	3	0	0	1	6	10
3	OE6200	Design of Offshore Structures	3	1	0	0	6	10
4	OE5070	Statistics and Dynamics of Marine Vehicle	3	0	0	1	6	10
5	OE5110	Experimental Methods & Measurements	3	0	0	2	6	11
6	DPE1	Department Elective 1	3	0	0	0	6	9
<b>Total Credits :</b>								<b>60</b>

**Semester 2**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE5080	Marine Instrumentation	3	0	0	0	6	9
2	OE5340	Ocean Env. Policy & Coastal Zone Mgmt.	3	0	0	0	6	9
3	OE5341	Marine Survey and Informatics	3	0	0	0	6	9
4	OE5170	Ocean Acoustics	3	0	0	0	6	9
5	DPE2	Department Elective 2	3	0	0	0	6	9
6	DPE3	Department Elective 3	3	0	0	0	6	9
<b>Total Credits :</b>								<b>54</b>

**SUMMER**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE5190	Practical training	0	0	0	0	16	16
<b>Total Credits</b>								<b>16</b>

**Semester 3**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE6901*	Project	0	0	0	0	16	16*
2	DPE4	Department Elective 4	3	0	0	0	6	9
3	DPE5	Department Elective 5	3	0	0	0	6	9
<b>Total Credits :</b>								<b>34</b>

*\* Project (OE6901\*) grade will be assigned in 4<sup>th</sup> semester*

**Semester 4**

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE6901	Project	0	0	0	0	40	40
<b>Total Credits :</b>								<b>40</b>

Semester	I	II	Summer	III	IV	Total
<b>Credits</b>	<b>60</b>	<b>54</b>	<b>16</b>	<b>34</b>	<b>40</b>	<b>204</b>

### LIST OF DEPARTMENT ELECTIVES

S.No	Course No	Course Name	L	T	E	P	O	C
1	OE5200	Dynamics of Ocean Structures	3	0	0	0	6	9
2	OE5210	Port Planning and Development	3	0	0	0	6	9
3	OE5300	Dynamics of Floating Bodies	3	0	0	0	6	9
4	OE5310	Guidance & Control of Marine Vehicles	3	0	0	0	6	9
5	OE5320	Nonlinear Problem in Ocean Engineering	3	0	0	0	6	9
6	OE5330	Advanced Marine Structures	3	0	0	0	6	9
7	OE5340	Ocean Environmental Policy & Coastal Zone Mgmt	3	0	0	0	6	9
8	OE5400	Port and Harbour Structures	3	0	0	0	6	9
9	OE5450	Numerical Techniques in Ocean Hydrodynamics	3	0	3	0	6	12
10	OE5500	FEM applied to Ocean Engineering	3	0	0	0	6	9
11	OE5600	Advanced Wave Dynamics	3	0	0	0	6	9
12	OE5800	Coastal Engineering	3	0	0	0	6	9
13	OE6200	Design of Offshore Structures	3	1	0	0	6	10
14	OE6300	Plated Structures and Shells	3	0	0	0	6	9
15	OE6980	Comp. Aid. Surface Dev. for Marine Vehicles	3	1	1	0	6	11
16	OE6990	Advanced Marine Vehicles	3	0	0	0	6	9
17	OE6020	Meshfree methods applied to hydrodynamics	3	0	3	0	6	12
18	PE6020	Drilling Technology	3	0	0	1	6	10
19	PE6090	HSE Management in Petroleum and Offshore Engg	3	1	0	0	6	10
20	PE6320	Subsea Engineering for oil and gas fields	3	0	0	0	6	9
21	OE 5050	Ocean Structures and Materials	3	0	0	0	6	9
22	OE 6002	Installation of Offshore Structures	3	0	0	0	6	9
23	OE 6004	Numerical Modeling of Offshore Structures	2	0	0	3	4	9
24	OE 6001	Materials and Fabrication of Offshore Structures	3	1	0	0	6	10
<b>ELECTIVES - OTHER DEPARTMENTS</b>								
25	AM6570	Flow Induced Vibration	3	0	0	0	6	9
26	ME7910	Acoustics & Noise Control	3	0	0	0	6	9
27	ME7360	Theory of Vibration	3	0	0	0	6	9
28	CH6020	Computational Fluid Dynamics	3	0	0	0	6	9
29	CE5230	Applied Fluid Mechanics	3	0	0	0	6	9
30	CE5720	Stability of Structures	3	0	0	0	6	9
31	MM5180	Non-Destructive Evaluation	3	0	0	0	6	9
32	MM5320	Corrosion Engineering	3	0	0	0	6	9
33	ID5020	Multibody dynamics and applications	3	0	0	0	6	9
34	AS 5820	Analysis of Plates and Shells	3	0	0	0	6	9
35	AS 5850	Finite Element Analysis	3	0	0	0	6	9
36	AS 5860	Composite Structures	3	0	0	0	6	9
37	AS5870	Energy Methods in Structural Analysis	3	0	0	0	6	9
38	AS5920	Dynamics of Elastic Systems	3	0	0	0	6	9
39	AS5960	Advanced Strength of Materials	3	0	0	0	6	9
40	AS5970	Structural Dynamics and Aeroelasticity	3	0	0	0	6	9
41	AM5116	Structural Control	3	0	0	0	6	9
42	AM5650	Nonlinear Vibrations	3	0	0	0	6	9
43	AM5570	Introduction to Turbulence	3	0	0	0	6	9
44	AM5340	Stochastic Processes in Structural Mechanics	3	0	0	0	6	9
45	AM5290	Dynamics of Structures	3	0	0	0	6	9
46	AM5600	Computational Techniques in Applied Mechanics	3	0	0	0	6	9
47	AM5610	Measurements in Mechanics	3	0	0	0	6	9
48	AM5390	Advanced Structural Mechanics	3	0	0	0	6	9
49	AM5530	Advanced Fluid Mechanics	3	0	0	0	6	9
50	AM5117	Analytical Methods in Mechanics	3	0	0	0	6	9
51	AM 5620	Theory of Plates and Shells	3	0	0	0	6	9

S.No	Course No	Course Name	L	T	E	P	O	C
52	AM5630	Foundation of Computational Fluid Dynamic	3	0	0	0	6	9
53	ME 6800	Finite Element Analysis	3	0	0	0	6	9
54	ME 7360	Theory of Vibration	3	0	0	0	6	9
55	ME6000	Computational Methods in Engineering	3	0	0	0	6	9
56	CE5620	Structural Dynamics	3	1	0	0	6	10
57	CE6780	Advanced Mechanics of Structures	3	1	0	0	6	10
58	CE5610	Finite Element Analysis	3	1	0	0	8	12