OCEAN ENGINEERING BS
Degree Plan (OEB)

GENERAL EDUCATION CURRICULUM

GEC 01. Written Communication (6 hours)
01. ENG 101
02. ENG 102

GEC 02. Natural Science (8 hours minimum)
01. Select 2 courses with labs:
   - AST 111/L
   - AST 112/L
   - BSC 103/L
   - BSC 110/L
   - BSC 111/L
   - BSC 250/L
   - BSC 251/L
   - CHE 104/L
   - CHE 106/L (4)
   - CHE 107/L
   - GHY 104/L
   - GHY 105/L
   - GLY 101/L
   - GLY 103/L
   - MAR 151/L
   - PHY 103/L
   - PHY 111/L
   - PHY 112/L
   - PHY 201/L (5)
   - PHY 202/L (5) *
   - PSC 190/L

GEC 03. Humanities (9 hours)
01. ENG 203
02. Select 2 courses, 1 History required
   - HIS 101
   - HIS 102
   - PHI 151
   - PHI 171
   - REL 131

GEC 04. Aesthetic Values (3 hours)
01. Select 1 course:
   - ART 130
   - DAN 130
   - MUS 165
   - THE 100

GEC 05. Social and Behavioral Sciences (6 hours)
01. Select 2 courses:
   - ANT 101
   - COH 100
   - ECO 101
   - GHY 101
   - PS 101
   - PSY 110
   - SOC 101

GEC 06. Mathematics Requirement (3 hours)
   Select 1 course:
   - MAT 100***
   - MAT 101
   - Higher-level MAT course*

GEC 07. Writing-Intensive Requirement (Major Area)
01. OE 417 (WI)
   - ENG 101 & ENG 102 prerequisites

GEC 08. Speaking-Intensive Requirement (Major Area)
01. OE 489 (SI)

GEC 09. Capstone Requirement (Major Area)
01. OE 497
   - Must be taken Senior Year;
   - ENG 101 & ENG 102 prerequisites

*This course satisfies both the GEC requirement and a program requirement for this major.
**This GEC course is required by this major.
***This course does not satisfy prerequisites for any other math course.
◊ GEC restrictions apply; see page XXX.

GEC 07 - GEC 09 courses are specific to the major.
For full description of the GEC, see page XXX.

PROGRAM CURRICULUM

DEG 01. Major Area of Study Requirements (43 hours)
01. OE 210 – Introduction to Marine Science & Engineering (3)
02. OE 227 – Ocean Engineering Analysis Methods (3)
03. OE 321 – Coastal Engineering (3)
04. MAR 366 – Ocean Acoustics (3)
05. MAR 366L – Ocean Acoustics Laboratory (1)
06. OE 326 – Fundamentals of Ocean Mechanics (3)
07. OE 391 – Summer Internship (3/3)
08. MAR 431 – Ocean Instrumentation (3)
09. OE 417 – Engineering Ethics and Safety (3)
10. OE 468 – Engineering Fluid Mechanics (3)
11. OE 489 – Marine Science Seminar – (1/1)
12. OE 493 – Ocean Engineering Projects & Design I (4)
13. OE 494 – Ocean Engineering Projects & Design II (4)
14. OE 497 – Ocean Engineering Capstone – (2)

DEG 02. Additional Requirements (45-58 hours)
01. CHE 106 – General Chemistry I (3)
02. CHE 106L – General Chemistry I Laboratory (1)
03. CSC 101 – Computer Science I (3)
04. CSC 101L – Computer Science I Laboratory (1)
05. PHY 201 – General Physics I with Calculus (4)
06. PHY 201L – General Physics I Laboratory (1)
07. PHY 202 – General Physics II with Calculus (4)
08. PHY 202L – General Physics II Laboratory (1)
09. MAT 167 – Calculus I with Analytic Geometry (3)
10. MAT 168 – Calculus II with Analytic Geometry (3)
11. MAT 169 – Calculus III with Analytic Geometry (3)
12. MAT 280 – Calculus IV with Analytic Geometry (3)
13. MAT 285 – Introduction to Differential Equations I (3)
14. AEC 270 – Statics and Strength of Materials (3)
15. AEC 390 – Engineering Economics (3)
16. PHY 327 – Electronics I (3)
17. PHY 327L – Electronics I Laboratory (1)
18. PHY 350 – Mechanics I (3)
19. Select a minimum of 12 hours from:
   - MAR 411 – Remote Sensing of the Ocean (3)
   - MAR 441/L – Marine Chemistry (3/1)
   - MAR 461/L – Physical Oceanography (3/1)
   - MAR 466 – Acoustics (3)
   - MAR 481/L – Geological Oceanography (3/1)
   - PSE 380 – Engineering Thermodynamics (3)

HOURS TO DEGREE
125 hours are needed to graduate with a BS in Ocean Engineering. At least 50 percent of the hours applied to a degree at The University of Southern Mississippi must be earned from a senior college, and 45 of these hours must be in courses numbered 300 or above. The student must earn at least 21 of the last 30 hours of course work and at least 12 hours in the major area of study from Southern Miss. See Residence Hour Requirements for more information.