

2015 Middle School Summer Engineering Technology Program

Introduction to Ocean Engineering

FAU SeaTech

101 North Beach Road, Dania Beach, FL 33004-3023

Phone: 954.924.7001 | NOTE: Students must bring lunch.

No food services available at this campus.

Instructor: Javed Hashemi, PhD

Offered Week 2: June 15-19 and Week 3: June 22-26

Learn more about the field of engineering

- Introduction of engineering topics to future engineers
- Promotion of critical thinking through engineering activities
- Team building and competitive activities

Schedule	Morning Session starts at 9 a.m.	Afternoon Session ends at 4 p.m.
Monday	<ul style="list-style-type: none">• Overview of Ocean Engineering major and activities planned for the week• Tour of surface vehicle lab	<ul style="list-style-type: none">• Lesson on boat design and propulsion• Build a solar boat• Enter your boat in a speed and directional control competition
Tuesday	<p>Robotics</p> <ul style="list-style-type: none">• Lesson on robot design• Design a hydraulically actuated robotic arm on paper• Tour of Robotic Fish Lab	<ul style="list-style-type: none">• Build the hydraulically actuated robot• Enter your robotic arm in a competition
Wednesday	<p>Ocean Energy : Current, Tidal, and Wave Energy</p> <ul style="list-style-type: none">• Design a wave and wind energy harvesting surface vehicle• Tour of Ocean Energy lab	<ul style="list-style-type: none">• Build a wind and wave energy harvesting boat• Enter your boat in a competition
Thursday	<p>Corrosion</p> <ul style="list-style-type: none">• Lesson on why things corrode• Tour of Corrosion lab	<ul style="list-style-type: none">• Design a corrosion cell• Print your name on an aluminum foil using corrosion principles.
Friday	<p>Acoustics (9 a.m. - 1 p.m.)</p> <ul style="list-style-type: none">• Design/test an underwater communication system• Pizza Party & Certificates	No afternoon session