

Program:	Marine Engineering Technology
Degree:	B.S. in Marine Engineering Technology
Department:	Marine Engineering Technology
Contact Name:	Matthew H. Kane, Ph. D., P.E.
Contact Phone:	409-740-4878

Outcome	Demonstrate technical knowledge in Applied Marine Engineering
Marketable Skills	<ul style="list-style-type: none"> • Apply mechanical engineering principles to solve problems • Apply electrical principles to address engineering challenges • Design components of engineering systems

Outcome	Apply engineering knowledge to operational systems
Marketable Skills	<ul style="list-style-type: none"> • Troubleshoot malfunctioning engineering systems • Specify appropriate parameters for completion of engineering tasks • Read engineering schematics

Outcome	Practice Ethical Engineering Behavior
Marketable Skills	<ul style="list-style-type: none"> • Recognize the need for ethical behavior • Understand the Engineering Code of Ethics • Be able to apply modern standards and codes to engineering systems

Outcome	Communicate Effectively
Marketable Skills	<ul style="list-style-type: none"> • Effectively communicate in an oral setting • Draft and edit technical engineering documents • Present data in an oral or visual format

Outcome	Collaborate in interdisciplinary teams
Marketable Skills	<ul style="list-style-type: none"> • Act as a leader or role player in a team • Share in group responsibilities to accomplish a task • Complete integrate system design in engineering teams

Outcome	Apply modern tools of the trade
Marketable Skills	<ul style="list-style-type: none"> • Use computer and automation tools to address issues in Naval Architecture and Marine Engineering • Solve complex mathematical systems related to engineering using engineering software • Use modern Computer Aided Design software to design systems

Outcome	Practice Social Responsibility and International Competence
Marketable Skills	<ul style="list-style-type: none"> • Interact with other ethnic groups and nationalities in a professional environment • Understand national and international maritime environment restriction

A student who graduates from Texas A&M with a baccalaureate degree will have acquired the knowledge and skills necessary to:

Master the depth of knowledge required for a degree, including the ability to:

- Articulate disciplinary and interdisciplinary theories, concepts, principles, skills, and practices;
- Synthesize knowledge across courses and other experiences; and
- Apply knowledge from core curriculum courses, discipline-based courses, and other experiences in a range of contexts to solve problems and make decisions.

Demonstrate critical thinking, including the ability to:

- Evaluate, analyze, and integrate information from a variety of sources;
- Use appropriate strategies and tools to represent, analyze, and integrate information; and
- Develop critical, reasoned positions.

Communicate effectively, including the ability to:

- Demonstrate effective oral communication skills (which could include the use of languages such as American Sign language for those who do not communicate orally);
- Demonstrate effective writing skills;
- Demonstrate effective nonverbal communication skills (which could include appropriate use of performance, design, or representations such as maps, tables, and graphs);
- Listen actively and critically;
- Present work effectively to a range of audiences; and
- Effectively communicate original and creative ideas.

Practice personal and social responsibility, including the ability to:

- Practice ethical leadership;
- Recognize an ethical dilemma and apply rational decision-making in order to address it;
- Choose ethical courses of action in research and practice;
- Acknowledge and address the consequences of one's own actions; and
- Engage in local and global civic activities.

Demonstrate social, cultural, and global competence, including the ability to:

- Live and work effectively in a diverse and global society;
- Articulate the value of a diverse and global perspective; and
- Recognize diverse economic, political, cultural, and religious opinions and practices.

Prepare to engage in lifelong learning, including the ability to:

- Exhibit the skills necessary to acquire, organize, reorganize, and interpret new knowledge;
- Show proficiency in current technologies and the ability to adapt to emerging technologies;
- Recognize and participate in activities that enhance wellness of body, mind, and spirit;
- Formulate a plan of personal goals for continued professional growth; and
- Demonstrate intellectual curiosity.

Work collaboratively, including the ability to:

- Participate effectively in teams;
- Consider different points of view; and

W
o
r
k

w
i
t
h

o
t
h
e
r
s

t
o

s
u
p
p
o
r
t

a

s
h
a
r
e
d