



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

Bachelor of Engineering (Naval Architecture and Offshore Engineering)

WELCOME TO
FACULTY
OF
**MECHANICAL
ENGINEERING**

The Bachelor of Engineering (Naval Architecture and Offshore Engineering) degree program is designed to meet the engineering needs of the maritime and offshore industries. The program integrates the relevant fields of naval architecture and other mechanical engineering disciplines with a special emphasis on offshore engineering.

The program provides the students professional knowledge and skills for employment in the marine / offshore engineering industries, including those involved in the design, development and maintenance of marine machineries, shipbuilding, marine classification societies and statutory authorities, power generation, offshore oil and gas production, and naval architecture.

Programme Duration
Full-Time, 4 years

FIELD OF STUDY



Naval Architecture

Ship and Offshore Design

Marine and Offshore Hydrodynamics

Ship and Offshore Production Technology

Marine and Offshore Engineering System

Marine Transportation

Project Management, Occupational Safety and Health

CONTACT US

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mech.utm.my

MEET OUR ALUMNI



“The engineering program of Naval Architecture and Offshore Engineering at UTM has proven to be a precious campus experience for me. We are in one family with one heart.”

Nurul Hanina bt. Abdul Hadi

*B.Eng (Naval Architecture & Offshore Engineering),
2015*

“Having a degree from UTM is a great honor for me. The high quality program in UTM has equipped me to start my professional career in giant engineering companies.”

*Asrul Alias, Asst. to Manager - Operation, ENSCO
B.Eng (Mechanical - Marine Technology), 2007*

“Choosing to attend an engineering program at UTM was an easy decision for me, it's well known for producing competent and world class professionals. The vast knowledge and opportunities for hands on learning available is what driven us to be the best.”

*Asyraf Shuisma, Field Professional, Halliburton
B.Eng (Mechanical - Marine Technology), 2013*



A new specialised course in Computer Modelling and Simulation (CMSE) field will be introduced for the 2018 cohort under the framework of InMotion.

InMotion is a European Union Grant project, under ERASMUS+ program. The aims of InMotion is to create new eLearning Materials for Computer Modelling and Simulation for Engineering (CMSE) field with Open Modelling and Simulation Environment platform (OMSE) based on innovative teaching strategies and creative learning approaches.

InMotion targets to train graduates, engineers, researchers from European Countries and Pacific Countries to be competent in the CMSE field.

Highlights of CMSE for Marine Applications course includes:

- student-centred approach;
- hybrid learning technologies;
- project-oriented teaching methods;
- different visual modelling environments for solving wide range of applied engineering problems;
- modelling and simulation of systems;
- an adaptive learning environment that meets the current needs of industry, focused on future technologies;
- interaction with potential employers at various stages of the training process;
- modern communication systems (high resolution video-conferencing systems) supporting interaction on scientific and educational research projects;
- international training opportunities within the InMotion project team members (international summer school, international collective mini-projects, etc.)



SELECTED COURSES

CORE PROFESSIONAL

Naval Architecture
 Marine Hydrodynamics
 Ship and Offshore Structures
 Ship and Offshore Production Technology
 Ship and Offshore Design
 Marine and Offshore Engineering Systems
 Marine Transport Economic
 Marine Management, Environment and Safety
 Ship Resistance and Propulsion

MATHEMATICS & APPLIED SCIENCES

Engineering Mathematics I-IV
 Engineering Statistics
 Mechanics of Solids
 Mechanics of Fluids
 Materials Science
 Materials Engineering
 Mechanics of Machines & Vibration
 Introduction to Design
 Statics & Dynamics
 Experimental Methods
 Electrical Technology

COMPUTER AND MATHEMATICAL MODELING

Engineering Drawing
 Programming for Engineers
 Applied Numerical Methods
 Finite Element Methods

INTERNATIONAL PARTNERS



ADVANTAGES OF PROGRAMME

- programme is supported by advanced testing facilities, such as towing tank;
- international educational programs participation (ERASMUS+ InMotion, Korean JTP, Sakura Scheme);
- possibility of continuing education in partner universities abroad, on master's degree program and post-graduate degree;
- participation in international conferences;

ENGINEERING TOOLS

- modern engineering labs that includes an open platform for distance learning and video-conferencing;
- ship and offshore structure design software i.e. MAXSURF, SHIPFLOW, ORCAFLEX, ANSYS, OPENFOAM
- modern CMSE software i.e. RMD, MATLAB/Simulink, Modelica, AutoCAD

INDUSTRIAL PARTNERS

