

# BEng (MECH) Curriculum Structure

(2015-16 intake)

## In-depth MECH Option (6-9)

Energy (9)

Materials (9)

Design (9)

Research (6)

## Routes for graduation:

- BEng(MECH) only = 109 credits + 11 free credits
- BEng(MECH) with ONE MECH Option = 118 credits + 2 free credits
- BEng(MECH) with TWO MECH Options = 127 credits
- BEng(MECH) with Research Option = 115 credits + 5 free credits
- BEng(MECH) with a Minor = 109 credits + 18 credits = 127 credits

Fall Offering: GREEN

Spring Offering: ORANGE

Summer/Winter Offering: PURPLE

Offering in both semesters: BLUE

→ Pre-requisite

## MECH Core (33)

MECH3310 (3)  
Heat Transfer

MECH3610 (3)  
Control Principles

MECH2210 (3)  
Fluid Mechanics

MECH3630 (3)  
Elec Technology

MECH2040 (3)  
Solid Mechanics I

1 course out of the following 3 courses (3)  
MECH3520 "Design & Manu II " or MECH3300 "Energy Conversion" or  
MECH3420 "Engineering Materials II "

MECH3030 (3)  
Mechanism of  
Machinery

MECH1990 (0)  
Industrial Training

MECH4900 (6) F/S  
Final Yr. Design Project

MECH3830 (3)  
Mechanical Lab

MECH2907 (3)  
Mechatronic Design &  
Prototyping

## MECH Fundamentals (18)

LANG4034 (3)  
Tech. Comm. II

ELEC2420 (3)  
Basic Elec.

MECH2410 (3)  
Eng. Materials I

MECH2310 (3)  
Thermodynamics

MECH2020 (3)  
Statics & Dynamics

MECH2520 (3)  
Design & Manu I

## Eng. Fundamentals (22-25)

MATH2011 (3)

MATH (3)  
MATH2111 or  
MATH 2351

1000-level Sci (3)

LANG2030 (3)  
Tech. Comm. I

MATH (4-7)\*  
MATH1012/ 1013/ 1023(3-4) and  
MATH1014/ 1024 (3)  
or MATH1020 (4)  
*\*In which 3 credits as U Core*

Physic (3)  
PHYS1112 or  
PHYS1312

ENGG (0)

ENGG1010 and ENGG2010

Computer Science (3)  
COMP1021 or COMP1022P  
or COMP1022Q

## University Common Core (36)

Humanities (H)

Sci & Tech (S&T)

English Com

Healthy Lifestyle

Soc Analysis (SA)

Quantitative Reasoning (QR)

Chinese Com

# Recommended Pattern of Study

for 4-year MECH major students admitted in 2015/16

Semester/Year	Course 1	Course 2	Course 3	Course 4	Course 5	Credits
Fall Year 1	MATH1012/ 1013/ 1020/1023	U Core: Eng. I	COMP1021/ 1022P/1022Q	U Core ME Intro	U Core	15-16
Spring Year 1	MATH1014/ 1024	U Core: Eng. II	1000-level Sci	PHYS1112/1312	U Core	15
Fall Year 2	MECH2020	LANG2030	ELEC2420	MECH2310	MATH2011	15
Spring Year 2	MECH2410	MECH2520	MECH2040	MECH2210	MATH2111/ 2351	15
Winter or Summer Year 2	MECH1990					
Fall Year 3	MECH3030	MECH3310	MECH3610	Electives MECH 3300/3420/ 3520^	U Core	15
Spring Year 3	MECH2907	LANG4034	MECH3630	MECH3830	U Core	15
Fall Year 4	MECH4900	MECH Option	U Core	U Core	Free	15
Spring Year 4	MECH4900	MECH Option	MECH Option	U Core	U Core	15

Note: The recommended study pattern is for reference only and subject to change without prior notice.

^ Course offering term is subject to change.