

The Department of MECHANICAL AND MANUFACTURING ENGINEERING

Level 1

BSc Industrial Engineering
BSc Mechanical Engineering
BSc Mechanical Engineering with Bio-systems

Course Code	Course Title	Credits	Sem.
	Foreign Language	E3	I
ENGR 1180	Engineering Mathematics I	E3	I
MENG 1005	Workshop Technology	C2	I
MENG 1006	Introduction to Engineering	E2	I
MENG 1008	Engineering Drawing	C3	I
MENG 1010	Statics & Strength of Material	E3	I
ECNG 1007	Electrical Engineering Technology	E3	II
ENGR 1001	Information Technology for Engineers	E3	II
MENG 1001	Engineering Thermodynamics I	E3	II
MENG 1004	Engineering Dynamics	C2	II
MENG 1009	Machine Drawing - (Pre-requisite: MENG 1008)	E2	II
MENG 1011	Engineering Fluid Mechanics	E2	II
MENG 1013	Communication Skills	C1	II

Total 32 Credits

The Department of MECHANICAL AND MANUFACTURING ENGINEERING

Level 2

BSc Mechanical Engineering
BSc Mechanical Engineering with Bio-Systems

Course Code	Course Title	Credits	Sem.
MATH 2230	Engineering Mathematics II - (Prerequisite: ENGR 1180)	E3	I
MENG 2004	Mechanics of Machines I - (Prerequisite: MENG 1004)	E3	I
MENG 2007	Engineering Thermodynamics II - (Prerequisite: ENGR 1180)	E3	I
MENG 2009	Industrial Instrumentation	E2	I
MENG 2010	Strength of Materials I - (Prerequisite: MENG 1010)	E3	I
MENG 2011	Machine Design I - (Prerequisite: MENG 1009;1010)	C3	I
MATH 2240	Statistics	E2	II
MENG 2003	Mechanical Vibration - (Prerequisite: MENG 1004)	E3	II
MENG 2008	Manufacturing Technology	E3	II
MENG 2012	Heat Transfer	E3	II
MENG 2013	Machine Design II	C3	II
MENG 2015	Control Systems Technology - (Prerequisite: ECNG 1007)	E3	II

Total 34 Credits

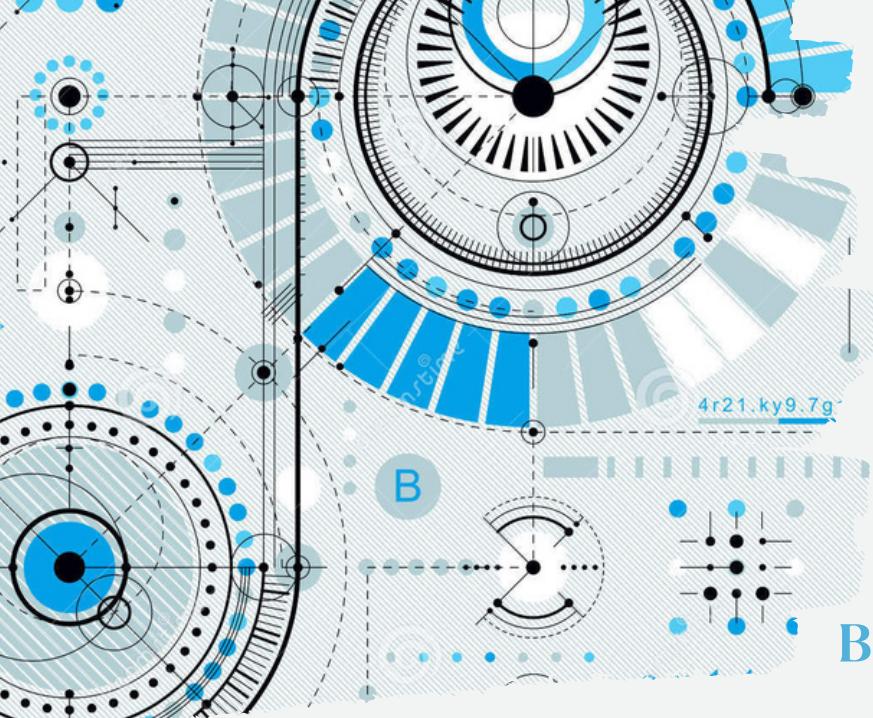
The Department of MECHANICAL AND MANUFACTURING ENGINEERING

Level 2

BSc Industrial Engineering

Course Code	Course Title	Credits	Sem.
IENG 2002	Operations Research I	E2	I
MATH 2230	Engineering Mathematics II - (Prerequisite: ENGR 1180)	E3	I
MATH 2250	Industrial Statistics	E3	I
MENG 2004	Mechanics of Machines I - (Prerequisite: MENG 1004)	E3	I
MENG 2009	Industrial Instrumentation	E2	I
MENG 2011	Machine Design I - (Prerequisite: MENG 1009;1010)	C3	I
IENG 2000	Work Study and Ergonomics	E3	II
IENG 2004	Industrial Database Systems & Design - (Prerequisite: ENGR 1001)	E3	II
IENG 2006	Engineering Economics, Accounting & Financial Management	E4	II
IENG 2007	Operations Research II - (Prerequisite: IENG 2002)	E2	II
MENG 2008	Manufacturing Technology	E3	II
MENG 2015	Control Systems Technology - (Prerequisite: ECNG 1007)	E3	II

Total 34 Credits



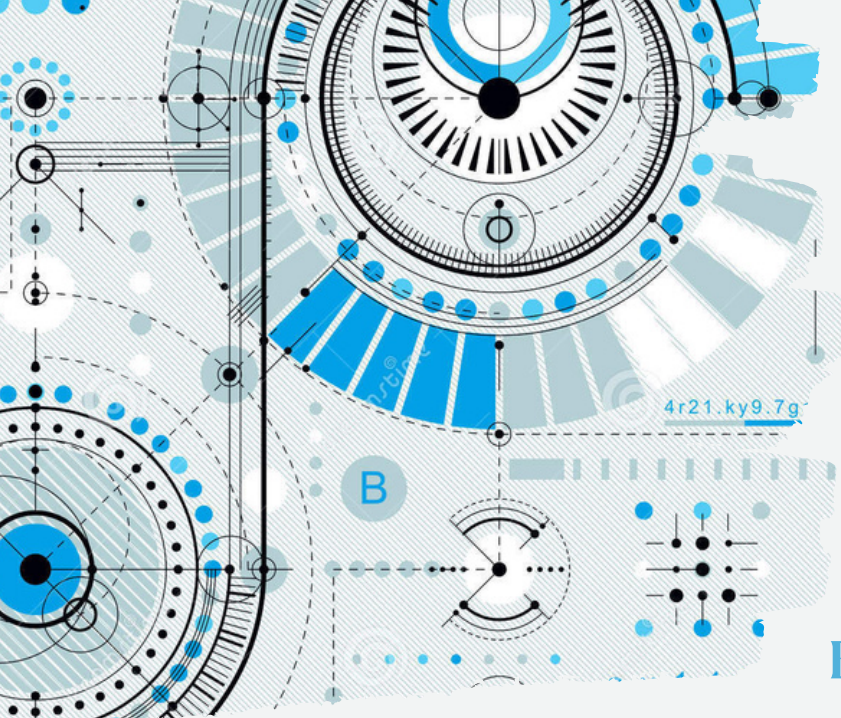
The Department of
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Level 3

BSc Industrial Engineering

Course Code	Course Title	Credits	Sem.
IENG 3000	Industrial Management	E3	I
IENG 3005	Quality Control & Reliability Engineering (Prerequisite: MATH 2250)	E2	I
IENG 3012	Industrial Engineering Project	C6	I & II
Together with any <u>THREE (3)</u> optional courses subject to the approval of the Head of Department to be chosen from:			
IENG 3015	Enterprise Information Systems - (Prerequisite: IENG 2004)	E3	I
IENG 3016	Applied Project Management	E3	I
IENG 3017	Industrial Design of Products & Services	C3	I
MENG 3015	Materials Technology	E2	I

Total 13 / 14 Credits



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Level 3

BSc Industrial Engineering

Course Code	Course Title	Credits	Sem.
IENG 3001	Production Planning & Control	E3	II
IENG 3002	Plant Layout & Materials Handling	E2	II
IENG 3012	Industrial Engineering Project	C6	I & II
MENG 3016	Maintenance & Safety Engineering	E3	II
Together with any <u>TWO (2)</u> optional courses			
ENGR 3000	The Technology of the Steelpan (Prerequisite: MATH 2230)	E3	II
IENG 3003	Behavioural Science in Management	E2	II
IENG 3006	Automation	E2	II
IENG 3013	Simulation of Industrial & Business Processes	E3	II
MENG 3001	Engineering Management II	E2	II

Total 12 / 14 Credits

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Level 3

BSc Mechanical Engineering

Course Code	Course Title	Credits	Sem.
ECNG 3030	Electromechanical Energy Conversion (Prerequisite: ECNG 1007)	E3	I
MENG 3000	Engineering Management I	E3	I
MENG 3019	Mechanical Engineering Project	C6	I & II
Together with any <u>THREE (3)</u> optional courses subject to the approval of the Head of Department to be chosen from:			
MENG 3006	Production Management	E3	I
MENG 3013	Product Design & Development	E3	I
MENG 3015	Materials Technology	E2	I
MENG 3017	Finite Element Methods in Engineering Practice (Prerequisite: MENG 1011; 2010; MATH 2230)	E3	I
MENG 3022	Energy Engineering - (Prerequisite: MENG 2007; 2012)	E2	I
MENG 3023	Environmental Control I - (Prerequisite: MENG 2007)	E2	I
MENG 3024	Strengths of Material II - (Prerequisite: MENG 2010)	E2	I
MENG 3025	Power Plant Engineering - (Prerequisite: MENG 2007)	E2	I

Total 12 / 15 Credits

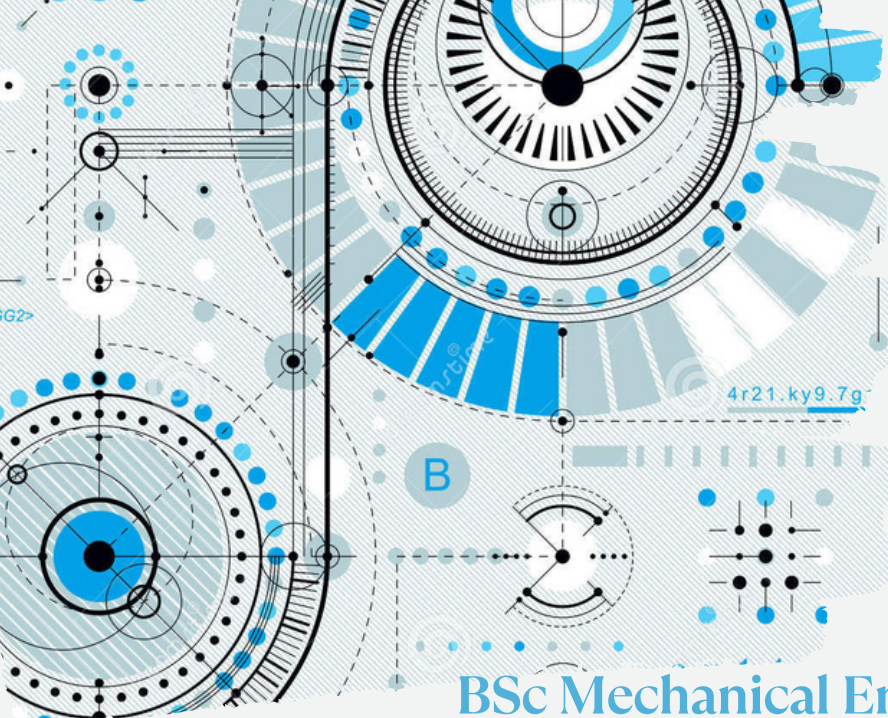
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Level 3

BSc Mechanical Engineering

Course Code	Course Title	Credits	Sem.
MENG 3016	Maintenance & Safety Engineering	E3	II
MENG 3019	Mechanical Engineering Project	C6	I & II
<p>Together with any <u>FOUR (4)</u> optional courses subject to the approval of the Head of Department to be chosen from:</p>			
ENGR 3000	The Technology of the Steelpan	E3	II
IENG 3002	Plant Layout & Materials Handling	E2	II
IENG 3006	Automation	E2	II
MENG 3001	Engineering Management II	E2	II
MENG 3011	Advanced Mechanics of Solids - (Prerequisite: MENG 3024)	E3	II
MENG 3014	Computer-aided Design & Manufacture	E2	II
MENG 3026	Renewable Energy - (Prerequisite: MENG 2012)	E2	II
MENG 3027	Traction & Power Hydraulics	E2	II
MENG 3028	Power Plant Engineering II - (Prerequisite: MENG 2007)	E2	II
MENG 3029	Environmental Control Engineering (Prerequisite: MENG 3023)	C2	II

Total 11/ 14 Credits



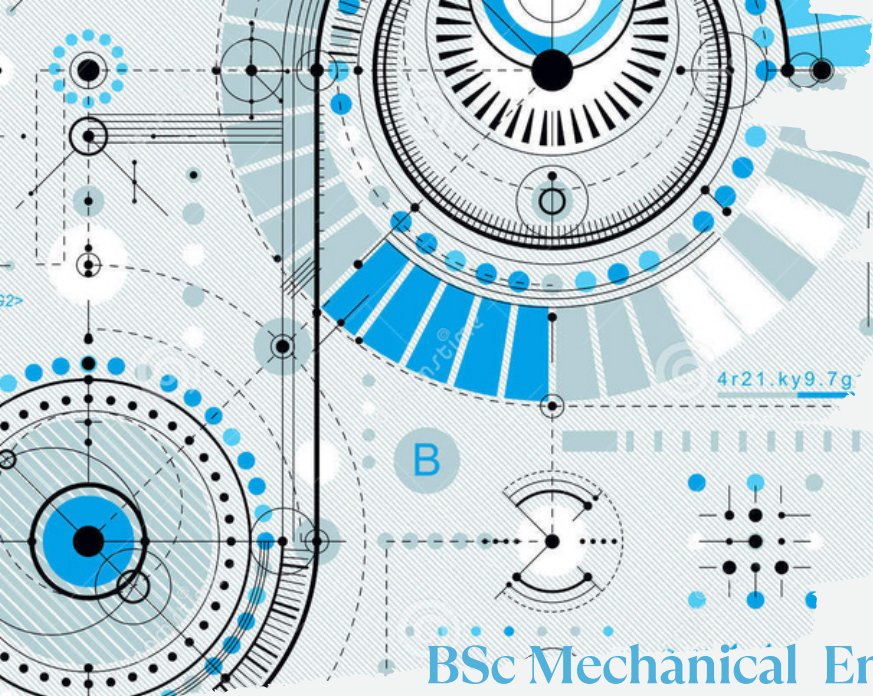
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Level 3

BSc Mechanical Engineering with Bio-Systems

Course Code	Course Title	Credits	Sem.
ECNG 3030	Electromechanical Energy Conversion (Prerequisite: ECNG 1007)	E3	I
MENG 3000	Engineering Management I	E3	I
MENG 3004	Soil & Water Engineering	E2	I
MENG 3019	Mechanical Engineering Project	C6	I & II
MENG 3020	Elements of Food Engineering	E2	I
MENG 3030	Basic Engineering Infrastructure - Only for this year	E2	I

Total 12 Credits



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Course Code	Course Title	Credits	Sem.
MENG 3016	Maintenance & Safety Engineering	E3	II
MENG 3019	Mechanical Engineering Project	C6	I & II
<p>Together with any <u>FOUR (4)</u> optional courses subject to the approval of the Head of Department to be chosen from:</p>			
CVNG 3007	Environmental Engineering I	E3	II
MENG 3001	Engineering Management II	E2	II
MENG 3007	Drainage & Irrigation Engineering	E2	II
MENG 3008	Field Machinery & Equipment	E2	II
MENG 3026	Renewable Energy - (Prerequisite: MENG 2012)	E2	II
MENG 3027	Traction & Power Hydraulics	E2	II

Total 11/ 14 Credits