

UNIT DISTRIBUTION

YEAR ONE			
SEMESTER ONE			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
AMM122	Mathematics I	3	42
EMS 100	Engineering Drawing I	4	56
UCU 100	Communication Skills	3	42
ACH 117	Chemistry I	4	56
SCS 100	Introduction to Computers and Applications	3	42
UCU 101	HIV/AIDS	3	42
APH 108	Physics I	4	56
TOTAL		22	336

YEAR ONE			
SEMESTER TWO			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
AMM 123	Mathematics II	3	42
EMS 101	Engineering Drawing II	4	56
EMS 102	Workshop Processes and Practice I	4	56
UCU 102	Development Studies and National Cohesion	3	42
SCS 101	Introduction to Computer Programming	3	42
ACH 118	Chemistry II	4	56
UCU 103	Introduction to Business and Entrepreneurship	3	42
APH 109	Physics II	4	56
Total		26	392

YEAR TWO			
SEMESTER ONE			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
AMM 214	Mathematics III	3	42
EMS 200	Engineering Mechanics	4	56
EES 200	Fluid Mechanics	4	56
EMS 201	Workshop Processes and Practice II	4	56
EMS 202	Computer Aided Design and Manufacturing	4	56
SCS 202	Object Oriented Programming	3	42
EES 204	Electric Circuit Theory I	4	56
EES 214	Physical Electronics	4	56
AMM 214	Mathematics III	3	42
TOTAL		30	420

YEAR TWO			
SEMESTER TWO			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
AMM 215	Mathematics IV	3	42
EMS 203	Solid and Structural Mechanics I	4	56
EES 202	Thermodynamics	4	56
EES 211	Electrical Instrumentation and Measurement	4	56
EES 207	Mechanics of Machines	4	56
EES 208	Material Science	4	56
EES 209	Electric Circuit Theory II	4	56
BCE 209	Engineering Economics	3	42
TOTAL		30	420

YEAR TWO		
SEMESTER THREE		
EMS 204	Internal Attachment	12 Weeks

YEAR THREE			
SEMESTER ONE			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
AMM 318	Linear Algebra	3	42
AMM 319	Applied Geometry	3	42
EMS 300	Production Technology	4	56
EMS 301	Solid and Structuring Mechanics II	4	56
EMS 302	Metrology	4	56
EMS 303	Mechatronic Systems Programming I	4	56
EES 315	Electrical Machines I	4	56
EES 314	Analogue Electronics	4	56
TOTAL		30	420

YEAR THREE			
SEMESTER TWO			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
AMM 320	Numerical Methods	3	42
AMS 335	Probability and Statistics	3	42
EMS 304	Mechatronics System Programming II	4	56
EMS 305	Planar Mechanics	4	56
EES 312	Digital Electronics	4	56
EES 316	Electrical Machines II	4	56
AMM 320	Numerical Methods	3	42
AMS 335	Probability and Statistics	3	42
TOTAL		30	420

YEAR THREE		
SEMESTER THREE		
EMS 306	Industrial Attachment I	12 Weeks

YEAR FOUR			
SEMESTER ONE			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
EMS 400	Spatial Mechanisms	4	56
EMS 401	Jig and Fixture Design	4	56
EMS 402	Design of Mechatronic Systems	4	56
EMS 403	Manufacturing Process Planning	4	56
EES 404	Control Engineering I	4	56
EES 400	Integrated Circuits	4	56
EES 405	Microprocessor Systems I	4	56
EES 415	Electric Machine and Drives	4	56
TOTAL		32	448

YEAR FOUR			
SEMESTER TWO			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
EMS 404	Mechanical Vibrations	4	56
EMS 405	Engineering Design	4	56
EMS 406	Electronic Product Design	4	56
EES 411	Control Engineering II	4	56
EES 413	Microprocessor Systems II	4	56
EES 408	Embedded Systems	4	56
EMS 407	Micro-electromechanical Systems	4	56
ECU 400	Engineering Management	3	42
TOTAL		31	434

YEAR FOUR		
SEMESTER THREE		
EMS 408	Industrial Attachment II	12 Weeks

YEAR FIVE SEMESTER ONE			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
EMS 500	Electro-Hydraulic and Pneumatic System	4	56
EMS 501	Industrial Engineering	4	56
EMS 502	Machine Design	4	56
EES 511	Programmable Logic Controllers	4	56
EES 501	Digital Control	4	56
EMS 503	Engineering Project I	4	56
*Electives (Two)			
EMS 504	Manufacturing Technology	4	56
EMS 505	Advanced Automotive Electrical and Electronics Systems	4	56
EES 529	Digital Systems Design	4	56
SCS 302	Artificial Intelligence	4	56
TOTAL		32	448

YEAR FIVE SEMESTER TWO			
UNIT CODE	UNIT TITLE	No. of Credit Hours	No. of Lecture Hours
EMS 506	Transmission Systems	4	56
EMS 507	Experimental Stress Analysis	4	56
EMS 508	Non-conventional Machining	4	56
EMS 509	Industrial Robotics	4	56
ECU 500	Professional Engineering Practice and Ethics	4	56
EMS 510	Engineering Project II	4	56
*Electives (Two)			
EMS 511	Composite Materials and Structures	4	56
EMS 512	Electric Vehicles	4	56
EES 525	Distributed Control Systems	4	56
EES 512	Biomedical Instrumentation and Systems	4	56
TOTAL		32	448