

BE+BAppSCIT

Year 1+2

Adv Dip in Engineering (60cp)+Dip IT (30 cp)

Year 3+4

Bachelor of Engineering (Electrical)

YEAR 3 +4

Subjects		
<u>BAE 401 Advanced Engineering Mathematics</u>		
<u>BAE 402 Calculus</u>		
<u>BAE 403 Engineering Mechanics</u>		
<u>BAE 404 Engineering Materials & Thermodynamics</u>		
<u>BAE 405 Advanced Circuit Analysis</u>		
<u>BAE 406 Electro-mechanics</u>		
<u>BAE 407 Advanced Electro-magnetics Field & Materials</u>		
<u>BAE 408 Analogue & Digital Electronics</u>		
<u>ICT 302</u>	<u>Digital Electronics</u>	3
<u>ICT 303</u>	<u>Amplifier</u>	3
<u>ICT 304</u>	<u>Material Science</u>	3
<u>BAE 501 Advanced Power Systems & Power Transmission Networks</u>		
<u>BAE 502 Linear System</u>		
<u>BAE 503 Control System</u>		
<u>BAE 504 Power System Analysis</u>		
<u>BAE 505 Power System Optimization</u>		

<u>BAE 506 Power System Stability & Protection</u>
<u>BAE 507 Electro-mechanical Energy Conversion</u>
<u>BAE 508 Industrial Engineering & Industrial Management</u>
<u>BAE 601 Computer Programming</u>
<u>BAE 602 Computer Network</u>
<u>BAE 603 Software Engineering</u>
<u>BAE 604 Telecommunication Engineering</u>
<u>BAE 605 Engineering Management</u>
<u>BAE 606 Building Service Electrical & Mechanical Engineering</u>
<u>BAE 607 Radio Wave Propagation & Microwave Techniques</u>
<u>BAE 608 Professional Engineer Competency Demonstration Report</u>
<u>ICT 401 Advanced Mathematics 1</u>
<u>ICT 402 Advanced Mathematics 2</u>
<u>ICT 305 Professional Programming (1) C++</u>

Engineering 72 CP+ ICT =12 CP= 84 CP

Year 5

<u>ICT 403</u>	<u>Professional Programming (2) Object Oriented</u>	3
<u>ICT 404</u>	<u>Professional Programming (3) Java</u>	3
<u>ICT 405</u>	<u>Professional Practice (1) Network</u>	3
<u>ICT 406</u>	<u>Professional Practice (2) Website</u>	3
<u>ICT 407</u>	<u>Artificial Intelligence</u>	3

Year 5= Engineering =24 CP+ICT 15 CP= 39 CP\

Total= Yr 1+2 90CP+ Yr 3+4=84CP+ Yr 5= 39 CP=Total 213 CP

Bachelor of Engineering (Civil)

Year (3) Part 1 ADVANCED GENERAL CIVIL ENGINEERING DEGREE LEVEL

Subjects
<u>BAE 401 Advanced Engineering Mathematics</u>

<u>BAE 402 Calculus</u>		
<u>BAE 403 Engineering Mechanics</u>		
<u>BAE 404 Engineering Materials & Thermodynamics</u>		
	<u>General Electrical Knowledge</u>	3
<u>ICT 302</u>	<u>Digital Electronics</u>	3
<u>ICT 303</u>	<u>Amplifier</u>	3
<u>ICT 304</u>	<u>Material Science</u>	
<u>BAE 508 Industrial Engineering & Industrial Management</u>		

[Year \(3\) Part 2 ADVANCED GENERAL CIVIL ENGINEERING DEGREE LEVEL \(18 Pt\)](#)

[BAE421 Building Construction Engineering \(4 pt\)](#)

[BAE422 Estimating \(2 pt\)](#)

[BAE423 Fluid Mechanics \(2 pt\)](#)

[BAE424 Reinforced Concrete \(2 pt\)](#)

[BAE425 Timber Engineering \(2 pt \)](#)

[BAE521 Road & Bridge \(2 pt \)](#)

[BAE522 Rock Mechanics \(2 pt \)](#)

[BAE523 Soil Mechanics \(2 pt \)](#)

[BAE 523A Environmental Engineering](#)

TOTAL 35 Pt

[Year \(4\) Part 1](#)

<u>BAE 601 Computer Programming</u>
<u>BAE 605 Engineering Management</u>
<u>BAE 606 Building Service Electrical & Mechanical Engineering</u>
<u>ICT 401Advanced Mathematics 1</u>

[ICT 402 Advanced Mathematics 2](#)

[ICT 305 Professional Programming \(1\) C++](#)

Year (4) Part 1

(12 Pt)

[BAE621 Structural Engineering \(3 pt \)](#)

[BAE623 Surveying & Traffic Engineering \(2 pt\)](#)

[BAE624 Water Supply , Sanitation & Finishing \(2 pt \)](#)

[BAE 608 Engineering Competency Demonstration Report Writing \(2pt\)](#)

SELF STUDY

[BAE622 Architecture \(3 pt \)](#)

Engineering 72 CP+ ICT =12 CP= 84 CP

Year 5

ICT 403	Professional Programming (2) Object Oriented	3
ICT 404	Professional Programming (3) Java	3
ICT 405	Professional Practice (1) Network	3
ICT 406	Professional Practice (2) Website	3
ICT 407	Artificial Intelligence	3

Year 5= Engineering =24 CP+ICT 15 CP= 39 CP\

Total= Yr 1+2 90CP+ Yr 3+4=84CP+ Yr 5= 39 CP=Total 213 CP

Bachelor of Engineering (Mechanical)

Year (3)

GENERAL APPLIED ENGINEERING (MECHANICAL) DEGREE

Subjects		
<u>BAE 401 Advanced Engineering Mathematics</u>		
<u>BAE 402 Calculus</u>		
<u>BAE 403 Engineering Mechanics</u>		
<u>BAE 404 Engineering Materials & Thermodynamics</u>		
	<u>General Electrical Knowledge</u>	3
<u>ICT 302</u>	<u>Digital Electronics</u>	3
<u>ICT 303</u>	<u>Amplifier</u>	3
<u>ICT 304</u>	<u>Material Science</u>	
<u>BAE 507 Electro-mechanical Energy Conversion</u>		
<u>BAE 508 Industrial Engineering & Industrial Management</u>		
<u>BAE511 Air-conditioning & Refrigeration Part 1</u>		
<u>BAE613 Mechanical Instrumentation Process</u>		
<u>BAE614 Machine Design</u>		
<u>BAE512 Building Service Water Supply System</u>		
<u>BAE511 Air-conditioning & Refrigeration Part 2</u>		
<u>BAE613 Mechanical Instrumentation Process</u>		
<u>ICT 401Advanced Mathematics 1</u>		
<u>ICT 402Advanced Mathematics 2</u>		
<u>ICT 305Professional Programming (1) C++</u>		

Year (4) Part 1 BE (Mechanical + General Related Subjects)

<u>BAE 601 Computer Programming</u>
<u>BAE 602 Computer Network</u>
<u>BAE 603 Software Engineering</u>
<u>BAE 605 Engineering Management</u>
<u>BAE 606 Building Service Electrical & Mechanical Engineering</u>

Year (4) Part 2

Bachelor of Engineering (Mechanical) Specialization (13 pt)

[BAE311 Plant Engineering \(2 pt\)](#)

[BAE312 Design Engineering \(2 pt\)](#)

[BAE313 Environmental Control \(2 pt\)](#)

[BAE314 Mechanical Power Generation \(2 pt\)](#)

[BAE315 Materials Engineering \(2 pt\) Part 1 Part 2](#)

[BAE 608 Engineering Competency Demonstration Report Writing \(3 pt\)](#)

Elective (2 pt)

Subjects	
<u>BAE513 Production Technology</u>	
<u>BAE611 Maintenance Engineering</u>	
<u>BAE612 Engineering Metallurgy</u>	

Engineering 72 CP+ ICT =12 CP= 84 CP

Year 5

<u>ICT 403</u>	<u>Professional Programming (2) Object Oriented</u>	3
<u>ICT 404</u>	<u>Professional Programming (3) Java</u>	3
<u>ICT 405</u>	<u>Professional Practice (1) Network</u>	3
<u>ICT 406</u>	<u>Professional Practice (2) Website</u>	3
<u>ICT 407</u>	<u>Artificial Intelligence</u>	3

Year 5= Engineering =24 CP+ICT 15 CP= 39 CP\

Total= Yr 1+2 90CP+ Yr 3+4=84CP+ Yr 5= 39 CP=Total 213 CP