FACULTY OF ENGINEERING & TECHNOLOGY

BSC (HONS) IN COMPUTING

Programme Details: This programme is an effective and important qualification that will arm the students with relevant skills set to champion as well as attain organisational goals and objectives. It provides a focused programme of study in the area of software design and development, providing an insight into technical skills and modern industry techniques. Software Engineering methodologies, computer programming and design are taught in this programme.

Core modules:

• C6 - DMA - 19: Discrete Mathematics (20)
• D5 - CSS - 14: Communication and Study Skills (20)
• C5 - ICO - 11: Introduction to Computers (20)
• C5 - MAT - 11: Mathematics for Computing (20)
• C5 - CSA - 11: Computer System Architecture (20)
• C5 - OSH - 11: Operating Systems & Hardware (20)
• C6 - QMD - 11: Querying and Managing Databases (40)
• C6 - IPC - 11: Introduction to Programming using C++ (20)
• C6 - DMO - 11: Database Management using Oracle (20)
• C6 - LIE - 19: Linux Essentials (20)
• C6 - WDD - 11: Web Design and Development (20)
• C7 - JAV - 11: Programming using Java (20)
• C7 - MD2 - 11: Managing Business Desktops 2 (20)
• C7 - ITP - 11: IT Project Management (20)
• C7 - DSA - 11: Data Structures and Algorithms (20)
• C7 - ADJ - 11: Advanced Java (20)
• C7 - NH1 - 11: Managing Network Hardware 1 (20)
• C7 - WN1 - 11: Windows Network Administration 1 (20)
• C7 - PPR - 11: Professional Practice (60)
• C8 - IDE - 11: Interaction Design (20)
• C8 - LNA - 11: Linux Network Administration (20)
• C8 - NH2 - 11: Managing Network Hardware 2 (20)
• C8 - WN2 - 11: Windows Network Administration 2 (20)
• C8 - PRO - 11: Project (40)
• C7 - SEN - 11: Software Engineering (20)

Selective modules:

Select any two from the following:
• C7 - SEN - 11: Software Engineering (20)
• C7 - PN1 - 11: Programming using .Net 1 (20)
• C7 - CP1 - 11: Designing Creative Publications 1 (20)
• C7 - MD2 - 11: Managing Business Desktops (20)

Select any one from the following:
• C8 - MAD - 11: Mobile Application Development (20) or
• C8 - 3DA - 14: 3D Design and Animation (20)
• C8 - AIN - 19 : Artificial Intelligence (20)

Select any one from the following:
• C8 - CP2 - 11: Designing Creative Publications 2 (20) or
• C8 - PN2 - 11: Programming using .Net 2 (20)
• C8 - CLC - 19: Cloud Computing (20)

Select any one from the following:
• B8 - ENT -13: Essentials of Entrepreneurship (20)
• E8 - ISD - 18: Innovation for Sustainable Development (20)
• C8 - APD - 20: Analytical Product Design (20)

Recommended full-time study path for Software Engineering specialisation (4½ years):
Semester 1:
• C5 - ICO - 11, C5 - MAT - 11, D5 - CSS - 14
Semester 2:
• C5 - CSA - 11, C5 - OSH - 11, C6 - DMA - 19
Semester 3:
• C6 - QMD - 11, C6 - IPC - 11
Semester 4:
• C6 - DMO - 11, C6 - LIE - 19, C6 - WDD -19
Semester 5:
• C7 - JAV - 11, C7 - SEN - 11
Elective: Select anyone
C7 - PN1 / C7 - CP1)
Semester 6:
• C7 - ITP - 11, C7 - DSA - 11, C7 - ADJ - 11
Semester 7:
• C7 - PPR - 11

Semester 8: • C8 - IDE - 11

First Elective: Select any one from the following:
• (C8-AIN - 19, C8 - MAD - 11, C8 - 3DA - 14)

Second Elective: Select any one from the following:
• (C8 - CP2 - 11, C8 - PN2 - 11, C8 - CLC - 19)

Semester 9:
Select any one from the following:
• C8 - PRO - 11, Elective (one of E8 - ISD - 18, B8 - ENT - 13, C8 - APD -20)

Recommended full-time study path for Network & Infrastructure Management specialisation (4½ years):
Semester 1:
• C5 - ICO - 11, C5 - MAT - 11, D5 - CSS - 14
Semester 2:
• C5 - CSA - 11, C5 - OSH - 11, C6 - DMA - 19
Semester 3:
• C6 - QMD - 11, C6 - IPC - 11
Semester 4:
• C6 - DMO - 11, C6 - LIE - 19, C6 - WDD- 19
Semester 5:
• C7 - JAV - 11, C7 - NH1 - 11, C7 - MD2- 11
Semester 6:
• C7 - ITP - 11, C8 - NH2 - 11, C7 - WN1 -11, C7-PIS-11
Semester 7:
• C7 - PPR - 11
Semester 8:
• C8 - LNA - 11, C8 - WN2 - 11
Select any one from the following:
•(C8 - AIN - 19, C8 - CLC -19)
Semester 9:
• C8 - PRO - 11,
Select any one from the following:
•(B8 - ENT -13, E8 - ISD -18)

Recommended full-time study path for General specialisation (4½ years):
Semester 1: • C5 - ICO - 11, C5 - MAT - 11, D5 - CSS- 14
Semester 2: • C5 - CSA - 11, C5 - OSH - 11, C6 -DMA -19
Semester 3: • C6 - QMD - 11, C6 - IPC - 11

Semester 4: • C6 - DMO - 11, C6 - LIE - 11, C6 - WDD- 19
Semester 5: • C7 - JAV - 11, C7 - SEN - 11

Select any one from the following:
• (C7 - PN1-11, C7-CP1-11, C7 - MD2 -11)

Semester 6: • C7 - ITP - 11, (C7 - DSA - 11, C7 - ADJ - 11)
Semester 7: • C7 - PPR - 11
Semester 8: • C8 - IDE - 11

First Elective: Select any one from the following:
• (C8 - MAD - 11, C8 - 3DA - 14, C8 - CP2- 11, C8 - PN2 - 11)

Second Elective: Select any one from the following:
• (C8 - AIN - 19, C8 - CLC - 19)

Semester 9: • C8 - PRO - 11
Select any one from the following:
• (E8 - ISD- 18, B8 - ENT - 13)

Admissions Criteria:
1) NSSC(O)/equivalent with minimum of 25 points in any 5 subjects
2) The student should have a grade D (or equivalent) in Mathematics or better and a grade E (or equivalent) in English or better
3) Applicants in possession of a Diploma or Higher Diploma in related field may be given exemptions based on the credit point equivalency