

UNIVERSITI
TENAGA
NASIONAL



The Energy University

COLLEGE OF COMPUTING & INFORMATICS (C.C.I)



Creative, Innovative & Energetic.

Wholly Owned Subsidiary of



INTRODUCTION

The use of Information & Communication Technology (ICT) is very pervasive nowadays. This has been the consequence of rapid developments in the ICT industry. The accelerated developments inevitably create skills & knowledge gaps that must be addressed by institutions of higher learning. College of Computing and Informatics (CCI), Universiti Tenaga Nasional (UNITEN) has been playing its role in bridging the gaps since many years & is positioning itself better for this venture into the future.

Our Graduates



Knowledge and Skills

- Computer Science
- Information Technology



Soft Skills

- Strong characters
- Strong interpersonal skills

Programme Quality

Industry Advisory Panel



- Industry Advisory Panel
- National Companies
- Multinational Companies
- Local Universities
- International Universities

Programme Advisor & External Examiner



- Japan
- United States
- United Kingdom
- Australia
- India
- New Zealand

Accredited Programmes



Industry Collaborators



Why You Should Choose Us?

HIGHEST STARTING SALARY in 2017
Employability rate*

*College employability rate as at 1 Feb 2016

3 YEARS
Accredited Programmes

BLENDED LEARNING*

*Applicable in selected courses

We facilitate additional certifications

Cisco Certified Network Associate (CCNA)

Certified Tester Foundation Level (CTFL) and Certified Tester Advance Level Test Manager (CTAL - TM)

ORACLE DB2

Information Storage and Management

Certified Professional for Requirements Engineering Foundation Level (CPRE-FL)

SAP

UNIVERSITY AWARDS

A showcase of UNITEN's Accolades.
The continuous quest for national & global recognition of excellence



**The Brand Laureate
2010-2011**
Best Brand in
Tertiary Education
(Engineering)



**Asia-Pacific Business
Excellence Standard Award**
APBEST Grand Award Winner of The Year
And Best Education Services In The Asia-Pacific



**The Brand Laureate
2008-2009**
Best Brand in Education
(Engineering and ICT)



**Prime Minister's Award for
Industry Excellence
2009**



**4th Business
of The Year Award**
Service Provider of
The Year 2010

"A prestigious recognition of industrial excellence through continuous efforts and development in education"



Brighten Your Path To Success At UNITEN

Let us empower you in building your brighter future.

**CAREER
PROSPECT**



Employability Rate

95%

**D-SETARA
(ENGINEERING)
&
SETARA 13**



**WEBOMETRICS
RANKING**

No. 1
Private
University



**High Quality
Recognized
Programmes**

For further details, please visit at: <http://www.uniten.edu.my/admission>

COURSE CONTENT

A. BACHELOR OF COMPUTER SCIENCE (SOFTWARE ENGINEERING) (HONS.)

(JPT/BPP(R/481/6/0398)03/19)



- Islamic/ Moral and Civil Society I
- Statistics for Computing
- Problem Solving
- Programming 1
- Computer Organisation
- Islamic/ Moral and Civil Society II
- Programming 2
- Hubungan Etnik
- Fundamentals of Software Engineering
- Database 1
- Data Communication and Computer Networks
- Discrete Structures
- Business English
- Technology Entrepreneurship

- Data Structure and Algorithms
- Object Oriented Programming
- Systems Design
- Requirement Engineering
- Human Computer Interaction
- Operating System Concepts
- Software Quality
- Artificial Intelligence
- Web Programming
- Industrial Training
- Software Project Management
- Project 1
- Energy and Computing
- Software Testing
- Project 2
- Ethics and IT Professional Practises
- Tamadun Islam Tamadun Asia
- IT Communication
- Personal Financial Management

Technical Elective

- Java Programming
- Real-time Systems
- Secure Programming
- Computer Forensics
- Database 2
- Data and Computer Security
- Mobile Application Development
- Multi Agent System
- Parallel Computing
- Advanced Web Application Development
- Emerging Technologies and Trends
- Design Concepts in Programming Languages

B. BACHELOR OF COMPUTER SCIENCE (SYSTEMS AND NETWORKING) (HONS.)

(JPT/BPP(R/481/6/0397)03/19)



- Islamic/ Moral and Civil Society I
- System Administration
- Programming I with C
- Computer Organization
- Digital Logic Design
- Islamic/ Moral and Civil Society II
- Programming II with C++
- Computer Networks and LAN
- Operating Systems Concepts
- System Analysis and Design
- Discrete Structures
- Business English
- Hubungan Etnik
- Data Structures and Algorithms with STL
- Database 1

- Advanced Computer Networks
- Data and Computer Security
- IT Communication
- Statistics for Computing
- Object Oriented Programming
- Human Computer Interaction
- Web Programming
- Industrial Training
- Project 1
- Energy and Computing
- Artificial Intelligence
- Project 2
- Network Analysis and Design
- Technology Entrepreneurship
- Personal Finance Management
- Storage Technologies
- Ethics and IT Professional Practices
- Tamadun Islam Tamadun Asia

Technical Elective

- Network Routing and WAN
- Mobile Application Development
- Embedded Systems
- Parallel Computing
- Network Penetration and Countermeasures
- Secure Programming
- Computer Forensics
- Software Testing
- Multi Agent Systems
- Database 2
- Image Processing
- AI & Game Aesthetic
- Emerging Technologies and Trends
- Machine Learning
- Wireless Networking

C. BACHELOR OF COMPUTER SCIENCE (CYBER SECURITY) (HONS.)

(JPT/BPP(N/481/6/0698)09/20)



- Free Elective 1
- Hubungan Etnik
- Islamic/ Moral and Civil Society I
- Tamadun Islam
- Tamadun Asia
- Programming I with C
- Computer Organisation
- Discrete Structures
- Islamic/ Moral and Civil Society II
- Programming II with C++
- Computer Networks and LAN
- Operating Systems Concepts
- System Analysis and Design
- Free Elective 2
- Ethics and IT Professional Practices

- Free Elective 3
- Data Structures and Algorithms with STL
- Database I
- Human Computer Interaction
- Computer Security
- Cryptography
- Object Oriented Programming
- Web Programming
- Network Security
- E-Commerce Security
- IT Communication
- Industrial Training
- Project 1
- Information Security Assurance
- Artificial Intelligence
- Security of Critical Infrastructure
- Project 2
- Technology Entrepreneurship
- Personal Finance Management

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|---|--|---|
| Technical Elective <ul style="list-style-type: none">• Steganography and Watermark• Network Penetration and Countermeasures• Secure Programming• Computer Forensics | <ul style="list-style-type: none">• Advanced Cryptography• Mobile Application Development• Parallel Computing• Emerging Technologies and Trends | Free Elective <ul style="list-style-type: none">• Sports and Recreation• Social Psychology• Comparative Religion• Creative Thinking• Mandarin• Business English |
|---|--|---|

D. BACHELOR OF INFORMATION TECHNOLOGY (GRAPHICS AND MULTIMEDIA) (HONS.)

(JPT/BPP(R/481/6/0396)03/19)



- Islamic/ Moral and Civil Society I
- Multimedia Technologies
- Statistics for Computing
- Problem Solving
- Computer System
- Basic Drawing
- Fundamental of Information Systems
- Multimedia Application Development
- Computer 3D Modeling
- Structured Programming using C
- Data Communication & Computer Networks

- | | | |
|--|---|---|
| <ul style="list-style-type: none">• Business English• Discrete Structures• Hubungan Etnik• Computer Graphics I• Introduction to Object Oriented Programming using JAVA | <ul style="list-style-type: none">• Multimedia System Interface Design• Database I• Web Programming• Industrial Training• Project I• Artificial Intelligence | <ul style="list-style-type: none">• Fundamental of Software Engineering• Islamic/ Moral and Civil Society II• Project 2• Media Assurance and Security• Technology Entrepreneurship• Image Processing and Computer Vision |
|--|---|---|

- | | | |
|---|--|--|
| <ul style="list-style-type: none">• Energy and Computing• IT Communication• Personal Finance Management• Tamadun Islam• Tamadun Asia• Ethics and IT Professional Practices | Technical Elective <ul style="list-style-type: none">• Game Design• Audio & Video Technology• Computer Animation• Virtual Reality• AI & Game Aesthetics | <ul style="list-style-type: none">• Digital Photography• Mobile Application Development• Multi Agent System• Emerging Technologies and Trends |
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E. BACHELOR OF INFORMATION TECHNOLOGY (INFORMATION SYSTEMS) (HONS.)

(JPT/BPP(R/481/6/0395)03/19)



- Islamic/ Moral and Civil Society I
- Fundamentals of Information Systems
- Structured Programming using C
- Multimedia Technologies
- Business English
- Statistics for Computing
- Introduction to Object Oriented Using JAVA
- System Analysis and Design
- Computer System
- Tamadun Islam Tamadun Asia
- Islamic/ Moral and Civil Society II
- Hubungan Etnik
- Discrete Structures

- Web Programming
- Database 1
- Data Communication and Computer Networks
- Human Computer Interaction
- Business Programming
- Database 2
- IS Project Management
- Technology Entrepreneurship
- IT and Business Process Reengineering
- Industrial Training
- Business Intelligence
- Project 1
- Project 2
- Principles of Management and Organisational Behavior
- Introduction to Knowledge Management
- Energy and Computing
- IT Communication
- Strategic Information Systems Planning

- Information Systems Auditing
- Personal Finance Management
- Ethics and IT Professional Practices
- Technical Elective**
 - Business Analytic
 - Internet of Things: Foundation and Applications
 - Information Security Management
 - IT Governance
 - Enterprise Resource Planning
 - Digital Business
- Emerging Technologies and Trends
- Software Testing
- Mobile Application Development
- Game Design
- Advance Web Application Development

F. BACHELOR OF INFORMATION TECHNOLOGY (VISUAL MEDIA) (HONS.)

(JPT/BPP (N/482/6/0102)12/20)



- Islamic/ Moral and Civil Society I
- Free Elective 1
- Creative Drawing
- Principles of Design & Infographics
- Computer System
- Multimedia Application Development
- Statistics for Computing
- Creative Programming I
- Multimedia System Design Infrastructure
- Ideation & Story Development
- 3D Modeling I
- Free Elective II
- Discrete Structure
- Hubungan Etnik

- Digital Game Design
- Information System
- Multimedia System Interface Design
- Web Programming
- Animation I
- Ethics and IT Professional Practices
- Tamadun Islam Tamadun Asia
- Personal Finance Management
- Free Elective IV
- Data Communication & Computer Networks
- Technology Entrepreneurship
- Process Workflow & Studio
- Project 1
- Visual Effect
- Comic and Manga Drawing
- Digital Lighting, Texturing & Rendering
- Industrial Training
- Project 2
- Energy and Computing

- Media Assurance and Security
- Free Elective III
- Islamic/ Moral and Civil Society II
- Technical Electives**
 - 3D Modeling II
 - Creative Programming II
- Digital Photography
- Audio Video Production
- Computer Graphics
- Animation II
- Mixed Reality
- Game Programming
- Free Electives**
 - Mandarin/ Japanese
- Introduction to Social Psychology
- IT Communication
- Creative Thinking
- Kaunseling dan Kerja Sosial
- Sport and Recreation Management at Workplace
- Business English



GYMNASIUM



VOLLEYBALL COURT



Creative, Innovative & Energetic.

STUDENT LOUNGE

PROGRAMMES OFFERED



- A. Bachelor of Computer Science (Software Engineering) (Hons.)
- B. Bachelor of Computer Science (Systems and Networking) (Hons.)
- C. Bachelor of Computer Science (Cyber Security) (Hons.)
- D. Bachelor of Information Technology (Graphics and Multimedia) (Hons.)
- E. Bachelor of Information Technology (Information Systems) (Hons.)
- F. Bachelor of Information Technology (Visual Media) (Hons.)

LABORATORY FACILITIES



The following are the dedicated laboratories for students CCI :

- Business Analytics Lab
- CISCO Lab
- Embedded System
- Image Processing
- Oracle Lab
- Parallel Programming
- Software Engineering Lab
- Virtual Reality

FOLLOW US

The College Information portal (CIP) is an alternative medium of information dissemination for the College of Computing and Informatics (CCI) at Uniten. At present, the main function of this portal is to disseminate information pertaining to the College's operations, which include announcements of deadlines (for examination, report submission, performance review exercise, call for paper, etc.), research activities, publications of paper and newsletters.



@csituniten



CSIT UNITEN Official



CAREER PROSPECTS

In general, graduates in an ICT field of any specialisation should be able to be employed in any of the following career positions:

- Programmer
- System Analyst
- Information Technology Specialist
- Information Technology Trainer
- Information Technology Executive
- Helpdesk Analyst
- Teaching (Universities or Training Institutions)
- Information Technology Consultant

However, with specialised knowledge in some particular areas, graduates may perform better in their specific jobs. This is well reflected in our degree programmes with six fields of specialisation. The following are some jobs specific to the areas of specialisation:



A. Bachelor of Computer Science (Software Engineering) (Hons.)

(JPT/BPP(R/481/6/0398)03/19)

- Software Engineer
- JAVA/ J2EE/ PHP/ .NET Developer
- Software Tester
- Software Quality Assurance
- Solutions Architect
- Web Developer
- Mobile Application Developer
- Technical Consultant



B. Bachelor of Computer Science (Systems and Networking) (Hons.)

(JPT/BPP(R/481/6/0397)03/19)

- Computer Programmer/ Software Developer
- Embedded System Programmer
- System/ Network Engineer
- System/ Network Consultant
- System/ Network Administrator
- High performance computing (HPC) software developer
- High performance computing (HPC) system engineer
- System Integrator
- Computer & Network Researcher



C. Bachelor of Computer Science (Cyber Security) (Hons.)

(JPT/BPP(N/481/6/0698)09/20)

- Cryptographer
- Forensics Expert
- Information Security Officer
- Penetration Tester/ Vulnerability Assessor
- Secure Software Developer
- Security Administrator
- Security Analyst
- Security Auditor
- Security Consultant
- Security Engineer
- System Administrator
- Security Incident Responder



D. Bachelor of Information Technology (Graphics and Multimedia) (Hons.)

(JPT/BPP(R/481/6/0396)03/19)

- Web Designer
- Creative Designer
- Animators
- Instructional Designer
- On-Line Publishing Editor/ Designer
- IT Support/ Helpdesk
- Advertising Manager
- Product Development Manager
- Media Analyst/ Strategist
- Game Programmer
- Game Tester
- Installation Artist



E. Bachelor of Information Technology (Information Systems) (Hons.)

(JPT/BPP(R/481/6/0395)03/19)

- Database Administrator
- Information Systems Manager
- IT Consultant
- System Analyst
- IT Technical Support Officer
- Systems Developer
- Data Scientist
- Data Engineer
- Business Intelligence Analyst



F. Bachelor Of Information Technology (Visual Media) (Hons.)

(JPT/BPP (N/482/6/0102)12/20)

- Storyboard Artist
- Illustrator
- 3D Artist
- Animator (2D & 3D)
- Game Programmer
- Photographer
- Visual Effect Artist
- Game Designer
- Ringing Technical Director
- Motion Graphic Designer
- Production Coordinator
- Video Editor

**UNIVERSITI
TENAGA
NASIONAL**



The Energy University



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