Pengarah Bahagian

Setiausaha Bahagian

Pengarah Kesihatan Negeri

Pengarah Hospital / Institusi Latihan

YBhg. Datuk / Dato' / Datin / Tuan / Puan,

PENGUMUMAN PINDAAN TARIKH PENAWARAN PROGRAM MSc IN CYBER SECURITY AND MANAGEMENT (MCSM) DAN MSc INTERNATIONAL TECHNOLOGY MANAGEMENT FOR DEFENCE AND SECURITY (MITM) ANJURAN UNIVERSITY OF WARWICK, UNITED KINGDOM DENGAN KERJASAMA UNIVERSITI PERTAHANAN NASIONAL MALAYSIA (UPNM)

Dengan segala hormatnya saya merujuk kepada perkara tersebut di atas.

2. Sukacita dimaklumkan bahawa Program MSc in Cyber Security and Management (MCSM) dan MSc International Technology Management for Defence and Security (MITM) yang ditawarkan oleh University of Warwick, United Kingdom dengan kerjasama Universiti Pertahanan Nasional Malaysia (UPNM) akan bermula pada September 2019. Program ini akan dilaksanakan secara modul iaitu lima (5) hingga tujuh (7) hari setiap bulan.


4. Syarat-syarat permohonan dan maklumat lengkap mengenai program ini adalah seperti di Lampiran I. Untuk sebarang pertanyaan, pihak YBhg. Datuk / Dato' / Datin / Tuan / Puan boleh menghubungi Dr. Syarifah Bahu Hay binti Syed Mansor di talian 010-3535053, Puan Nurul Fizani binti Zaubah di talian 03-90513400 (samb. 1001) atau Encik Mohd Afiz bin Othman di talian 03-90513400 (samb. 2137).

Sekian.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menjalankan amanah,

(AZLAN BIN AHMAD)
Bahagian Pengurusan Latihan
b.p Ketua Setiausaha
Kementerian Kesihatan Malaysia
s.k

i. Timbalan Ketua Pengarah Kesihatan (Perubatan)
   Kementerian Kesihatan Malaysia

ii. Timbalan Ketua Pengarah Kesihatan (Kesihatan Awam)
    Kementerian Kesihatan Malaysia

iii. Timbalan Ketua Pengarah Kesihatan (Sokongan & Teknikal)
    Kementerian Kesihatan Malaysia

iv. Pengarah Kanan
    Program Kesihatan Pergigian
    Kementerian Kesihatan Malaysia

v. Pengarah Kanan
    Program Perkhidmatan Farmasi
    Kementerian Kesihatan Malaysia

vi. Pengarah
    Bahagian Bahagian Kesihatan Bersekutu
    Kementerian Kesihatan Malaysia

vii. Pengarah Kanan
    Program Keselamatan Dan Kualiti Makanan
    Kementerian Kesihatan Malaysia

viii. Pengarah,
    Bahagian Kejururawatan
    Kementerian Kesihatan Malaysia

ix. Pengarah
    Bahagian Amalan Perubatan
    Kementerian Kesihatan Malaysia

x. Semua Timbalan Pengarah Kesihatan Negeri (Pengurusan)
BAHAGIAN SUMBER MANUSIA
Cawangan Pengurusan Perkhidmatan
Kementerian Kesihatan Malaysia
Blok E1, E3, E6, E7 & E10
Kompleks E, Pusat Pentadbiran Kerajaan
62590 Putrajaya

YBhg. Datuk/Dato'/Datin/Tuan/Puan,

PINDAAN TARIKH PENAWARAN PROGRAM MSc IN CYBER SECURITY AND MANAGEMENT (MCSM) DAN MSc INTERNATIONAL TECHNOLOGY MANAGEMENT FOR DEFENCE AND SECURITY (MITM) ANJURAN UNIVERSITY OF WARWICK, UNITED KINGDOM DENGAN KERJASAMA UNIVERSITI PERTAHANAN NASIONAL MALAYSIA (UPNM)

Merujuk perkara di atas dengan hormatnya dan surat kami sebelum ini adalah berkaitan.

2. Adalah dimaklumkan Program MSc in Cyber Security and Management (MCSM) dan MSc International Technology Management for Defence and Security (MITM) yang ditawarkan oleh University of Warwick, United Kingdom dengan kerjasama Universiti Pertahanan Nasional Malaysia (UPNM) akan bermula pada September 2019. Bagi memudahkan pembelajaran, program ini dilaksanakan secara modul iaitu 5 hingga 7 hari setiap bulan.


Sekian,

“KEWAJIPAN, MARUAH, INTEGRITI”

Saya yang menjalankan amanah,

KOLONEL FELO KANAN SOFIAN BIN KAMARUDDIN (BERSARA)
Pengarah
Institut Pengajian Eksekutif UPNM (NIEEd)
Universiti Pertahanan Nasional Malaysia

s.k: - Pengarah, Pusat Keselamatan Siber, UPNM
- Penyelaras, Program MSc Cyber Security & Management (MCSM)
FULL-TIME
MSc IN CYBER SECURITY AND MANAGEMENT
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Introduction

Threats to our cyber security are real, and Malaysia requires professionals with the knowledge and skill to understand and mitigate threats systematically. We believe that strong and effective management and governance, as well as technical skill, are paramount in ensuring cyber security risks are properly managed within an organisation. Through this combined approach, Malaysia can maintain and protect its critical services and information infrastructure.

Welcome

To make an impact on business and industry today, you are expected to be a problem solver, team player, practitioner, and strategist. WMG’s MSc programmes will help you develop the vital mix of technical knowledge and management theory, plus the softer skills that you’ll need to create impact throughout your career.

As one of the largest academic departments at the University of Warwick (ranked in the top ten UK universities), and a leader in applied research and development with global companies, WMG offers world class management education with real business application. You will be taught by visiting WMG tutors in intensive blocks of study. Assignments are designed to enable you to apply your learning to your industrial context, and your chosen major research project will be supervised jointly by your company experts and staff from NDUM.

NDUM has collaborated with WMG at the University of Warwick on postgraduate programmes since 2012, and we are pleased to be able to offer their MSc in Cyber Security and Management to our students. This programme has been very well received in the UK and can now be studied right here in Malaysia.

You will also have the opportunity to augment your study by undertaking modules at one or more of our other partner centres should any modules not be offered at present in Malaysia, or if business needs mean that you are based elsewhere for a time?

Visit our MSc Facebook page to see what life is like as a WMG student: http://www.facebook.com/wmgmasters

If you decide to join a WMG programme, I look forward to meeting you and supporting you through your study.

Eur Ing Professor Amanda Dowd, BSc, PhD, CEng, FIET
Academic Director of Graduate Studies (WMG)
About Warwick

The University of Warwick is a leading university in the UK, where the starting point is always ‘anything is possible’.

Part of the renowned Russell Group, and one of the UK’s prominent universities for teaching and research, Warwick has consistently ranked within the UK Top 10 since its inception in 1965. In just 50 years, we have become a leading higher education institution, earning the title of University of the Year 2014-2015 from The Times and Sunday Times.

Our vision is to be a truly world class university. One with a dynamic, enterprising approach to solving global challenges; one that enables students to create their place in the world; one that defines the university of tomorrow. We are proud that the QS annual World University Rankings have named us as one of the world’s Top 50 universities. Furthermore, The Times Higher Education (THE) have declared us one of the seven fastest-rising young universities in the world.

We were one of the first universities to break out of the ‘ivory tower’ and realise the benefits of connecting academia with industry. Right from the start, we’ve worked with thousands of successful companies, from global corporates, to SMEs and local start-ups. The scope of our expertise means our business partners are rewarded with connected solutions across the entirety of our institution.

These links with industry mean we are able to transfer the latest knowledge and thinking to our students across all our faculties, giving them the best possible start in their career. Indeed, Warwick graduates are the third most often targeted by the UK’s top employers. In the QS World University Rankings, Warwick is ranked in the Top 20 in the world for employer reputation.

Our vibrant international community and outstanding resources and reputation mean that by choosing Warwick, you will be making a significant step towards your future.

www.warwick.ac.uk
WMG offers you a unique opportunity to gain a world class management education with real business and industry application.

One of the largest academic departments at the University of Warwick, we are a leading multidisciplinary group making a real impact through collaborative R&D and world class education.

Founded by Professor Lord Bhattacharyya in 1980, we are driving innovation across the areas of business transformation, manufacturing, systems, materials, and design. Working together with industry, we develop solutions to both business and technical challenges. Our work has helped organisations to improve their competitiveness in a wide range of sectors including automotive, aerospace, defence, digital, construction, energy and utilities, finance, food and drink, healthcare, IT, pharmaceuticals, security, and rail.

Today WMG is one of the world’s leading research groups, cited by UK government as an international role model for how universities and business can successfully work together. Some of our partners include Airbus, Arup, Bosch Ltd, Jaguar Land Rover, Nikon, Siemens, TVS Motors, Tata Motors, and Tata Steel.

By leveraging the results of these collaborations, and transferring that knowledge to our students, we have become a leading centre for both technical and management education, developing the future skills base for global industry. Challenging traditional ways of thinking, and sharing our expertise and experience, we develop well-rounded individuals who can progress to the highest level.
In the UK, we deliver undergraduate engineering programmes, a substantial full-time Master’s programme spanning 14 specialist courses, award-winning part-time professional education, and PhD and EngD programmes. We welcome students from 60 countries to the Warwick campus each year, and have a vibrant international community.

Partnering with universities and institutions in China, India, Malaysia, Singapore, Thailand, Cyprus, and Turkey means that we can combine our expertise and ethos with their knowledge of the regional marketplace. This ensures we are still providing you with the best possible education even if you can’t study with us in the UK.

Rolls-Royce, and UTC Aerospace to name a few. We are also a key partner in the Jaguar Land Rover Learning Academy, which provides lifelong learning opportunities to its workforce.

As a legacy of our success over the last 35 years, we have an alumni network of over 30,000 people, reaching every corner of the world. We are proud of the accomplishments and contributions of all our students, many of whom have gone on to become global CEOs or successful entrepreneurs in their own right.

We also work with global companies to create custom programmes for their workforce, both in the UK and overseas. Our partners have included AstraZeneca, BAE Systems, Bharat Forge, China Aviation Industry Corporation, HSBC, www.wmg.warwick.ac.uk
About National Defence University of Malaysia (NDUM) WMG

UPNM was formerly known as Akademi Tentera Malaysia (ATMA) or the Malaysian Armed Forces Academy which was established on June 1, 1995. The institution was also branded as the sole organization responsible in upgrading the knowledge and academic status of the armed forces by offering bachelor degree courses in fields of engineering, sciences and managements while not neglecting the basic requirements of military training.

The bachelor degree courses were accredited and awarded by University Teknologi Malaysia in the beginning. Lecturers – some from within the armed forces, some hired by the academy and the rest deputised by UTM where all were fully committed to changing the face of the Malaysian armed forces.

In November 10, 2006, ATMA's responsibility was recognized and further given a boost when it was upgraded to university status creating the current UPNM. The establishment of the university was announced by our former Prime Minister Datuk Seri Abdullah Ahmad Badawi during the Budget 2007 reading at the Malaysian Parliament. The setting of the university cost was RM500 million and was fully borne by the Government of Malaysia.

The university's first intake of students was for the 2007/2008 session which amid new changes having admission the first intake of civilian undergrads. Universiti Pertahanan Nasional Malaysia prepares the Malaysian military and civilian leaders to better address national and international security challenges through multi-disciplinary educational programmes, research, professional exchanges and outreach. Though the university was not too long ago established, it has already chalked up over 11 years of experience in education.
and training since 1995 with over 1000 graduates in the fields of engineering, computer science and management. These graduates have all been successfully inducted and now suit as full officers in the Malaysian Army, Royal Malaysian Navy, Royal Malaysian Air Force, also in other Government Sectors and Non Government Sectors.

Collaboration NDUM and WMG

NDUM has started its collaboration with The University of Warwick since 2012 as part of its global partnership. The collaboration started with the inception of a Master program i.e. Master of Science in Engineering Business Management for Defence Studies (MEBM). The collaboration will be enhanced with the introduction of new program which is well received in UK, i.e. the MSc. in Cyber Security and Management (MCSM).
About the programme

MSc Cyber Security and Management (MCSM)

Designed by WMG's Cyber Security Centre at the University of Warwick, this programme is for those wanting to take a leading technical or managerial role in an organisation critically dependent on data and information communication. Our MSc in Cyber Security and Management (CSM) will help you to understand and apply cyber security in a consultancy, strategic, business or management context.

Over the course of one year, you’ll develop a clear understanding of the cyber threat landscape and will acquire the skills to build and manage secure systems to support the strategic deployment of cyber security within an organisation.

A mix of research-led teaching, practical exercises, and real-world scenarios from guest speakers will help you to really engage with the programme and understand how to apply your learning to your own organisation. Upon successful completion of the programme, you will be awarded your MSC in Cyber Security and Management from The University of Warwick, UK.

Objective of the MCSM

To provide advance understanding of managing cyber security within an organization. The student will be taught the techniques and technologies used in an organization security architecture and cover key areas of information risk management and network in defence. The course also prepares students in the broad skills required for effective management and leadership excellence.

Who should enrol?

Typically, students will have a background in computing or IT, but this is not essential. If you have a particular interest in cyber security and a good level of technical competence we would be pleased to consider your application.

Individuals in, or looking to move into, the following career roles are particularly encouraged to apply:

✓ Military officer
✓ Police officer
✓ Security agency officer
✓ Information security officer
✓ Risk officer
✓ Cyber investigation officer
✓ Cyber intelligence officer
✓ Chief information officer
✓ Protective security officer
✓ Educator
Modules
The programme is comprised of 10 taught modules (assessed through post-module assignments), and one major project/dissertation.

Modules will each run over five days, at NDUM, and will be delivered by WMG tutors. You will be expected to submit your post-module assignment within 6 weeks of the completion of each module.

Security Architectures and Network Defence
The first Cyber Security module begins by introducing the domain and the core fundamental concepts relating to cyber security. Students will gain a comprehensive understanding of the underlying security infrastructure and in particular the protocols required in setting up a system where secure transaction (financial or communicational) are required.

The syllabus also includes malware and attacks, the threats ecosystem, phishing, pharming and data theft, the AAA of security, firewalls and defence and Intrusion Detection System.

Industrial Espionage and Counterfeiting
This module examines the motivations for industrial espionage and the various method of attack on the physical security of an organisation, its electronic infrastructures and its staff and suppliers.

Student will learn to analyse and mitigate potential attacks through industrial espionage; will develop an understanding of counterfeiting attacks and design countermeasures; and will carry out risk
Cryptosystems and Data Protection

This module focuses on the technology and concepts behind data protection and in particular the numerous cryptosystems and protocols that allow us to keep communications private.

We also focus on the use of encryption technology to provide authorization and access control systems. Throughout the module we disentangle often complex protocols to begin to understand how they work. The module will enable you to develop a broad understanding of data-centric protection, data-leakage threats and vulnerabilities and key prevention and detection technologies.

Information Risk Management and Governance

This module will develop your ability to establish and maintain an information risk management framework in order to guarantee that security and assurance strategies are aligned with business objective and are consistent with legal and regulatory obligation.

A strong focus will be put on business continuity and resilience and there is an emphasis on the practical nature of this process and the issues that face managers in the real world.
Digital Forensics, Evidence and Intelligence

Cyber-crime affects all walks of life and transcends personal, social and business domain. This module investigates the core techniques currently used for the purpose of data retrieval, evidence preparation, crime scene management and intelligence extraction where the source of data is a digital storage system. It will give an overview of national and international digital forensic investigation infrastructures and put legal procedure into context.

Global E-Business

In this module you will critically examine the processes and organisational structures that enable future manufacturing and service enterprise to win business, deliver systems, products or services and maintain relationships in the radically more complex business landscape.
Business Strategy and Strategic Management

The increasingly dynamic and complex global business environment in which most organisations operate requires managers to be aware of the impact of strategic decision-making on their business. This module introduces the main features of strategic thinking and the strategic management process including the strategy formulation process.

Leading Change

Organisations today operate in a rapidly changing business environment that demands ever higher standards of operations, business efficiency and customer service. This module is designed to give participants an understanding of change and the reasons for it. We look at the strategic models and tools and measures, as well as giving the hands-on experience of managing change and dealing with the consequences of change within a simulated business environment.
Project Planning Management and Control

This module provides an understanding of the principles, philosophies and methods of project management. It establishes an appreciation of, an ability to apply, current tools and techniques for project planning and control, including the selection and management of project teams.

Financial Analysis and Decision Making

This module provides an understanding of the main accounting statements together with an awareness of basic accounting principles, terminology and techniques which will enable you to interpret financial reports and information. An introduction to management accounting practices as an aid to effective operational financial planning controls is also included.
Your project

Your project accounts for 50% of your final grade and will support you in developing your personal research and analytical skills. Through the project you will be able to focus on a topic of specific interest you or your organisation. This might include risk management, security policy, enterprise security cultures, intrusion detection, cloud exploitation and procurement strategies, data forensics, and security testing.

Within the first month of the programme you will be expected to submit a proposal for your dissertation, and you’ll be assigned an appropriate academic supervisor from WMG.

Submission of the final dissertation (20,000 words) will be three months after completion of your final module. However, you are expected to work on this alongside the taught modules, and to devote an appropriate amount of time to the project throughout the year. The dissertation will be assessed by an oral exam at the end of the year.
“This is real life! The course is perfectly designed to prepare people for a working environment. For each module, there's an intensive week of learning that provides a wealth of information. Then through the PMS, I was able to research the subject in more depth and present my findings in a document that would be relevant to someone at board or ministerial level. It's exactly what you do as a consultant: research and analyse information, then make your findings meaningful to a particular audience and their business priorities.”

Rebecca Falconer, UK
MCSM Graduate 2016
Eligibility for the programme

Entry requirements
Bachelor of Science in IT or Computer Science, or Technology Management, with a minimum CGPA of 2.50 from a university recognised by the University of Warwick.

Those with a lower minimum CGPA must have a minimum of two years’ work experience in a related field.

Language requirements
As the course will be delivered in English, you should have one of the following qualifications:
- IELTS: 6.5
- TOEFL iBT: 92
- ADFELPS: 7

FEES
*RM 12000 to RM 30000
(*Subject to change)

Application
NDUM Institute of Executive Education (NIEEd)
National Defence University of Malaysia
Sungai Besi Camp,
57000 Kuala Lumpur, Malaysia
Tel: (+603) 9051 3400
Ext: 3549/3090/4640/7622591/ 7621070
Fax: (+603) 9051 3089
Website: http://www.upnm.edu.my
Getting in touch

NDUM Institute of Executive Education (NIEEd)
National Defence University of Malaysia
Sungai Besi Camp,
57000 Kuala Lumpur, Malaysia
Tel  : (+603) 9051 3400
Ext : 3549/3090/4640/7622591/7621070
Fax  : (+603) 9051 3089
Website: http://www.upnm.edu.my

The information contained in this brochure was correct at the time of going to print.
FULL TIME
MSc International Technology Management for Defence and Security Taught in Malaysia
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Introduction

Global investment in technology is growing faster than in most other areas, and as a result the discipline of technology management has become increasingly important. Getting the most out of technology investments is becoming much more complex, and much harder to achieve.

Strong and effective management and governance, as well as technical skill, are paramount in ensuring technologies are properly managed within organisations. Technology Management is of strategic importance to companies and governments worldwide, and essential for national competitiveness and prosperity. By developing the capability to better understand and manage technologies effectively, Malaysia can compete on a global playing field.

Welcome

To make an impact on business and industry today, you are expected to be a problem solver, team player, practitioner, and strategist. WMG’s MSc programmes will help you develop the vital mix of technical knowledge and management theory, and the softer skills that you will need to create impact throughout your career.

As one of the largest academic departments at the University of Warwick (ranked in the top ten UK universities), and a leader in applied research and development with global companies, WMG offers excellent management education with real business application.

You will be taught at NDUM by visiting WMG tutors in intensive blocks of study. Assignments are designed to enable you to apply your learning to your industrial context, and your chosen major research project will be supervised by staff from NDUM, and supported by experts from your organisations. NDUM has collaborated with WMG at the University of Warwick on Postgraduate programs since 2012, and we are pleased to be able to offer an MSc International Technology Management for Defence and Security to our students. This programme has been developed by WMG in collaboration with local Malaysian experts in technology management in the defence and security sector.
About Warwick

The University of Warwick is a leading university in the UK, where the starting point is always 'anything is possible'.

Part of the renowned Russell Group, and one of the UK’s prominent universities for teaching and research, Warwick has consistently ranked within the UK Top 10 since its inception in 1965. In just 50 years, it has become a leading higher education institution, earning the title of University of the Year 2014-2015 from The Times and Sunday Times.

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www.warwick.ac.uk
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Founded by Professor Lord Bhattacharyya in 1980, WMG is driving innovation across the areas of business transformation, digital manufacturing, systems, materials, and design. Working together with industry and governments, they develop solutions focused on addressing industry and governments technical challenges. Their work has helped organisations to improve their competitiveness in a wide range of sectors including automotive, aerospace, defence, digital, construction, energy and utilities, finance, food and drink, healthcare, IT, pharmaceuticals, security, and rail. drink, healthcare, IT; pharmaceuticals, security, and rail.

In the UK, they deliver undergraduate engineering programmes, a substantial full-time Master’s programme spanning 14 specialist courses, award-winning part-time professional education, and PhD and EngD programmes. Welcoming students from 85 countries to the Warwick campus each year, they have a vibrant international community.

Today WMG is one of the world’s leading research groups, cited by UK government as an international role model for how universities, business and governments can successfully work together. Some of their partners include Airbus, AstraZeneca, Bosch Ltd, Dyson, GE Aviation, Jaguar Land Rover, Nikon, Siemens, TVS Motors, Tata Motors, and Tata Steel.

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www.wmg.warwick.ac.uk
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The university's first intake of students was for the 2007/2008 session which amid new changes having admission the first intake of civilian undergrads. Universiti Pertahanan Nasional Malaysia prepares the Malaysian military and civilian leaders to better address national and international security challenges through multi-disciplinary educational programmes, research, professional exchanges and outreach. Though the university was not too long ago established, it has already chalked up over 11 years of experience in education and training since 1995 with over 1000 graduates in the fields of engineering, computer science and management. These graduates have all been successfully inducted and now serve as full officers in the Malaysian Army, Royal Malaysian Navy, Royal Malaysian Air Force, also in other Government Sectors and Non Government Sectors.

Collaboration between NDUM and WMG

NDUM has been collaborating with the University of Warwick since 2012, as part of a global partnerships campaign. The collaboration started with the inception of an MSc in Engineering Business Management for Defence Studies (MEBM). The collaboration will be enhanced with the introduction of the new MSc in International Technology Management for Defence and Security (MITMDS).
About the MSc International Technology Management for Defence and Security (MITMDS) programme

Designed by WMG’s Technology Management team at the University of Warwick, this programme is aimed at those who aspire to become influential leaders and managers in Engineering, Design, Manufacturing, Operations and Support functions in government or industry; those who can analyse business opportunities, operationalise technologies and innovate in ways of working.

The programme looks at how to deliver value and benefit through the exploitation of innovation and fast technological change.

Over the course of one year, you’ll develop a clear understanding of the international technology landscape and gain the expertise to manage the development, acquisition and operation of technology, particularly with respect to emerging and digital technologies.

A mix of research-led teaching, practical exercises and international case studies, and exploring real-world scenarios from guest speakers will help you to really engage with the programme and understand how to apply your learning to your own organisation.

Upon successful completion of the programme, you will be awarded an MSc International Technology Management for Defence and Security from the University of Warwick, UK.

Objective of the MITMDS

The objective of the course is to provide in-depth knowledge, useful skills and a critical understanding of the concepts and tools relevant to strategic analysis, leadership and international management of technology, with a strong focus on their application in the Defence & Security environment.

Who should enrol?

Typically, students will have a background in science, engineering or other relevant discipline, but this is not essential. If you have a particular interest in technology management and a good level of business or operational competence we would be pleased to consider your application.

This programme will be of particular relevance to individuals in, or looking to move into, a leadership or managerial role in which technology decision-making and innovation play a major part.

While the programme is designed for full-time students studying over a period of 12 months, there are opportunities for working professionals to take the programme over a two to three year period.
MITMDS modules

- Technology Strategy
- Technology Management & Innovation for Defence & Security
- International Acquisition & Collaboration
- Leadership & Change in the Defence & Security Sector
- Project Planning, Management & Control for Defence & Security
- Research Methodology
- Systems Thinking & Systems Engineering
- Project Financial Management
- Reliability, Maintainability & Operability
- Managing in a Defence & Security Multi-Programme Environment

In addition to attending ten modules - each of a week's duration - you will undertake a significant research project that relates to the management of technology or technical functions in an international context, and is relevant to the defence and security sector. Each module is described in more detail below.

MITMDS MODULES SYNOPSIS

Technology Strategy

Looks at where Technology Strategy sits within an organisation's overall strategy. It examines the process of technology strategy development and the implementation of a successful technology strategy.

- Organisation Strategy
  - Internal and external analysis
  - Vision, mission and strategy
  - Stakeholder analysis and management
  - Communication for effective strategic management

Technology Strategy (and alignment with organisation strategy)

- Drivers and key technology trends in the defence & security sector
- Process of technology strategy development
- Review of the main academic approaches, tools and techniques for developing and implementing technology strategy
- Technology road mapping
- Practical approaches for the implementation of technology strategy
Technology Management and Innovation for Defence & Security
Consorts the role and value of innovation and technology in organisations, with a focus on the defense and security sector. It addresses how to manage innovation and technology at both a strategic and operational level in organisations. It reviews how to select and apply appropriate frameworks and techniques for identifying, assessing and delivering technological change at an acceptable risk.

- Innovation & competitive performance
- Relationship between technology and innovation
- Emergent technologies in defence & security
- Creating an environment for innovation
- Linking technology management to technology strategy
- Technology management frameworks
- Technology readiness assessment and technology auditing

Leadership & Change in the Defence & Security Sector
Equip students with an understanding of the leadership challenges of operating in a public/private multiple stakeholder environment and to be able to both initiate change and to implement change in the specific context of technological enhancement applied to Malaysia’s defence and security sectors.

- Exploring the Public and Private sector context in/for Malaysian defence
- Stakeholder analysis and management
- Contemporary theories and Models of Change
- Leadership of self and others in relation to problem definitions
- Transition, transformation and continuous improvement
- High Involvement approaches
- Resistance and compliance — getting to Win/Win

International Acquisition & Collaboration
Develops the skills and knowledge to enable efficient and effective acquisition decision-making, within an international context, where collaboration can enhance financial, technological and operational performance.

- International approaches to Acquisition
- Acquisition Strategies and Procedures

Project Planning, Management & Control for Defence & Security
Covers the generic principles of Project Management Planning and Control for any project in any environment, then focuses on the specific approaches, tools and techniques that are relevant to wider technology management projects in a defence and security environment.

- Definitions of Projects, Programmes and Portfolios (P3M)
➢ Project lifecycles and methodologies
➢ Characteristics of different projects in different environments (Type, Scale, Complexity, Uncertainty, Volatility, Ambiguity and Risk)
➢ Tools and techniques for the planning, management and control of time, cost, performance and risk
➢ Formulation and Management of project teams through the life-cycle
➢ Selection of appropriate methodologies and tools

Research Methodology
Introduces the generic aspects of research methodology that are needed in order to define, implement and write-up a research project within the defence and security sector and provides an overview of some of the main research techniques that could potentially be employed.

➢ Introduction to the research process
➢ Research design
➢ Reviewing the literature
➢ Critical thinking
➢ Qualitative data analysis
➢ Quantitative data analysis
➢ Writing an academic document

Systems Thinking & Systems Engineering
Establishes key principles and methods of systems thinking to help students assess complex problems and needs in the Malaysian defence and security sector.

➢ Systems thinking and systems engineering concepts and principles
➢ How systems engineering activities are directed and managed effectively to meet a business' goals
➢ Identifying stakeholders
➢ Capturing and managing requirements and translating these, systematically, into appropriate solutions
➢ Managing systems engineering teams
➢ Risk management in systems engineering

Project Financial Management
Addresses the financial management of projects and provides a basic understanding of business accounting statements, so that participants can interpret financial information. It gives an introduction to management accounting practices as an aid to effective project financial planning and control, and introduces the financing of projects.

➢ Introduction to Project and Business Finance
➢ Financial statements
➢ Profit vs. Cash. Control of cash flow and its implications
➢ Budgetary Control Systems and Techniques
➢ Costing Techniques to ascertain, recover and control costs
➢ Marginal Costing and Contribution Analysis
➢ Capital Expenditure Evaluation and Financial Evaluation of Projects
➢ Financing and business structures for large projects

Reliability, Maintainability & Operability
Develop the skills and knowledge to be able to apply confidently reliability and maintenance concepts to business operations, and understand their impact on operational performance.

➢ Introduction to Reliability, Availability and Maintenance (RAM)
➢ QFD
➢ RAM tools – FMEA, FTA, RBD, Markov Analysis
➢ Asset management
Project

Your project is worth 50% of your final grade and supports you in developing your personal research skills.

For International Technology Management, the project will relate to the management of technology or technical functions in an international context.

Warwick will use their best efforts to deliver the course as described in this brochure and meet the degree level learning objectives of the course. There may be circumstances beyond our control that lead to some change. See www.warwick.ac.uk/study/postgraduate/terms.

"MSc International Technology Management equipped me with the business acumen necessary for today's constantly changing workplace. Studying at WMG was great, thanks to its unique course structure, which meets the needs of global industry. The assessments really helped to develop my knowledge of business, management and strategy. I know that the skills I have gained from this course will really help to bolster my career."

MSc International Technology Management for Defence & Security 10
Eligibility
for the
programme

Entry requirements
A Bachelor Degree with a minimum CGPA of 2.50 from a university recognised by the University of Warwick.

Those with a lower minimum CGPA must have a minimum of two years' work experience in a related field.

Applicants with higher diploma may apply and each application will be considered on its merits.

Language requirements
As the course will be delivered in English, you should have one of the following qualifications completed in the last 2 years.

- IELTS: 6.5
- TOEFL IBT: 92
- ADELEPS: 7

FEES
*RM 12000 to RM 30000
(*Subject to change)

Part-time students should contact UPNM for detailed prices.

Company sponsorship may be available depending on your employer.

Application
NDUM Institute of Executive Education (NIEEd)
National Defence University of Malaysia Sungai Besi Camp,
57000 Kuala Lumpur, Malaysia
Tel: (+603) 9951 3400
Ext. (3549/3550/4640/7622591/7621070
Fax: (+603) 9051 3089
Website: http://www.upnm.edu.my
# Application for Postgraduate Studies

## Postgraduate Admissions Team
University House, The University of Warwick, Coventry, CV4 8UW, UK

### Personal Information

**Last Name (family name)**
This is the name under which your file will be registered and the name you should use on any future correspondence with us.

**Title**
Please add the title you normally use.

**Forename(s) (given names) in full**
Please add all your forename(s) in the order in which they normally appear.

**Informal Name** (This is any name you wish to be known by)

**Date of Birth**

## Course Details

**Application**
Please state the qualification for which you are applying.

**Are you planning to study full-time or part-time?**
Start date

**Have you ever been a student at Warwick?**
Please enter your university number, if known.

## Communication with you

**Permanent home address**
Your permanent home address. This address will also be used as the address for correspondence unless you give details below:

**Email**

**Correspondence address**
If you are a resident away from home, eg as a student, or you may be away from home for a significant period, please give you contact address and dates.

**Correspondence Email**

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### University Number:
OFFICE USE ONLY

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<th>DD/MM/YYYY</th>
<th>Gender</th>
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<td>Male</td>
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**Course of Study:**

**Department:**

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<th>No</th>
<th>Yes</th>
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**Postcode**

**Mobile**

**Telephone**

**Fax**

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**From:**

**To:**

---

**Postcode**

**Mobile**

**Telephone**

**Fax**
Nationality and residence details

Nationality

Country of permanent residence
The country in which you have been normally resident, except for periods of temporary absence.

Please state the number of years you, your parents and, if applicable, your spouse, have been resident in the UK, Switzerland or other EU country.

Do you have Qualified Teacher Status (QTS)?
If you have been resident in more than one country please give dates of residence in each country.

Academic History

Are you currently studying at an educational institution?
If yes please give the expected end date of that course.

Qualifications held
Please state the titles of your qualification(s) as it appears on your official transcript & certificates.

Name of University / College and Country
Dates attended (eg 1995 -1999)
Degree awarded and class eg BA (Hons) 2i,
Degree with date
Principal subjects taken

Qualifications Pending

Name of University / College and Country
Dates attended (eg 1995 -1999)
Degree expected and class
Degree expected with date
Principal subjects taken

English Language Qualifications

Have you been educated in the UK for at least a year?

Have you been educated in an English speaking country?

Have you been educated entirely in English for your degree?

Note: Please see the Postgraduate Directory for further information on English Language requirements.

I took / will be taking a language test on (date)

Type of test taken

Test Score

IELTS

TOEFL

WELT

The Score is
References

Please name two referees

The two referees should normally be teachers in higher education who have direct knowledge of your academic work. (Applicants with work experience may nominate a person with knowledge of their employment to act as one of their referees. If a recent second academic reference is not available or this is requested for the course for which they have applied.)

Please remember to enclose your references with your application.

Academic interests and purpose of study

Note: all applicants must complete this section

Please use this space to describe your special academic interests and your purpose and objectives in undertaking graduate study. You may continue on a separate sheet if necessary.

Referee 1

Name
Position
Address
Tel
Fax
E-mail

Referee 2

Name
Position
Address
Tel
Fax
E-mail

If you have discussed your research proposal with a Warwick staff member please enter their name:

Career History

Please give your employment history to date or other professional experience excluding vacation work, starting with the most recent

Dates from and to
Nature of work and position held
Name and address of employer
Finance
How would you finance yourself at Warwick?

Please state to which other Universities you are applying
We ask for this information for our own records – it does not affect your application to us.

Source of Information about Warwick
Please indicate the first and second two most important sources of information which influenced you to apply for a postgraduate place at Warwick.

Special Needs
The University welcomes applications from people with special needs and considers them on the same academic grounds as those from other candidates. It is helpful to know about your special needs in advance so that we can discuss whether facilities are available in the University. Applicants with special needs are encouraged to contact the disability co-ordinator, tel: 024 7657 3734 or Email: disability@warwick.ac.uk

Are you a registered disabled person?

Yes ☐
No ☐

Do you have any criminal convictions?

Yes ☐
No ☐

Equal Opportunities Monitoring
(UK Students only)
Please help us to make our equal opportunities policy effective by placing a tick in the box which is applicable to you

Asian
☐ Indian
☐ Pakistani
☐ Bangladeshi
☐ Chinese
☐ Other Asian Background

Black
☐ Caribbean
☐ African
☐ Other black background

Mixed Race
☐ White & Black Caribbean
☐ White & Black African
☐ White & Asian
☐ Other mixed background

White
☐ British
☐ Irish
☐ Other white background

Declaration
I hereby apply for admission to postgraduate studies at the University of Warwick and I confirm that the information provided above is correct to the best of my knowledge. I understand that any offer of admission may be withdrawn if I cannot provide documentary evidence of any statements on this form.

Signature

Date
UNIVERSITY OF WARWICK
WMG

REFERENCE FOR ADMISSION TO POSTGRADUATE STUDY

PART 1: To be completed by the Applicant
Please complete your name and proposed course of study and send one form to each referee requesting that the reference be sealed in an envelope, signed by the referee across the seal and returned to you. You should then send your two references together with the completed application form to CENTRE ADDRESS.

Name of Applicant: __________________________________________

Proposed MSc Programme: __________________________________________

PART 2: To be completed by the Referee
The person named above has applied for admission to the University of Warwick as a graduate student. I should be most grateful if you would provide us with a reference on the applicant’s academic and general suitability to undertake the proposed course of study by completing the remainder of this form. Recognizing the fact that the time of the referees is valuable and quite often the request for a serious assessment of the candidate arrives during a busy period, we provide this simplified form which may enable the referees to save time in responding. However, a traditional letter of reference or any other format you consider most useful would be very welcome as an alternative. In considering applications, the Selection Committee attaches great importance to the information which is provided in references and I should like to thank you for your assistance. Your reply will be treated in confidence by the University and you may be contacted to seek further information.

Please return this form to the applicant in an envelope, signed across the seal to ensure confidentiality or, if you prefer, you can return the reference direct to the CENTRE ADDRESS.

REFERENCE
1. How long have you known the applicant and in what capacity?

2. Please state degree and classification/qualification obtained by candidate.  
   If results not yet known please give expected result.

3. Please evaluate the applicant on the scale below in comparison with others you have known during your professional career and indicate which reference group you are using. Please tick the appropriate boxes.

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<th>Outstanding</th>
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<th>Insufficient information</th>
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<td>Maturity</td>
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<tr>
<td>Performance in work/study</td>
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</table>

Undergraduate students ..................................  Industrial trainees ..................................
Professional colleague .....................................  Other (Please specify) ................................
UNIVERSITY OF WARWICK
WMG

4. Is the applicant effective in working with others?
(Consider whether the applicant completed assignments, works well as a team member, takes initiative, assumes leadership, performs well under stress)

5. Rate the applicant’s achievements compared to those of his or her peers.

6. Only for applicants whose first language is not English.
Describe the applicant’s ability to comprehend, and communicate in English both orally and in writing.

7. Please add any additional statement that may help in assessing the applicant’s suitability for the course.

8. Please tick appropriate box

   I strongly recommend this student’s admission to your course.

   I recommend this student be admitted.

   I recommend with some reservation that this student be admitted.

   I recommend with significant reservation that this student be admitted.

   I do not recommend this student’s admission to your course.

Name of referee (Block Capitals Please): .................................................................
Position / Title: ........................................................................................................
Address: ...................................................................................................................
.............................................................................................................................
...........................................................................................................................
Telephone: .............................................. Email: ..............................................
Signature of Referee: ................................. Date: ..............................................

Thank you for taking time to tell us about the applicant
PART 1: To be completed by the Applicant

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Professional colleague ......................................... Other (Please specify) ........................................
UNIVERSITY OF WARWICK
WMG

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8. Please tick appropriate box

☐ I strongly recommend this student's admission to your course.

☐ I recommend this student be admitted.

☐ I recommend with some reservation that this student be admitted.

☐ I recommend with significant reservation that this student be admitted.

☐ I do not recommend this student's admission to your course.

Name of referee (Block Capitals Please): ........................................................................................................

Position / Title: ...........................................................................................................................................

Address: ......................................................................................................................................................

.........................................................................................................................................................

Telephone: .......................................................... Email: .................................................................

Signature of Referee: ........................................ Date: .................................................................

Thank you for taking time to tell us about the applicant
Applicant Guidelines and Checklist

Please read this section carefully.

The Postgraduate Admissions Team aims to provide a high standard of service to applicants but sometimes delays do occur. It is important that you send the supporting documentation with the application or as soon as possible afterwards if applying online. If you send your documents to us in one envelope we can process your application more quickly.

The Postgraduate Admissions Team deals with all application correspondence. Please do not send documents directly to the department because documents must be processed by Postgraduate Admissions before your application is valid.

You must send two academic references. We will accept professional references only if you have not been in full time education within the last five years. Your references must be signed and on official letter headed paper. We will not accept references by email or fax.

You must send an original transcript of your degree or an officially attested copy. If your transcript is not in English we must have a translation bearing an official stamp. We will not accept transcripts that have not been officially translated.

We regret that the Admissions Office cannot return original documents sent in support of your application. If you do not wish to send in original documents then submit appropriately certified or attested copies.

A document will be considered as a valid copy if it has been stamped by a recognised authority. A recognised authority must be either an educational institution (e.g. your current / previous university), a legal representative (e.g. a lawyer or public notary), or an overseas representative of the University of Warwick (please contact our International Office for details). The documents must have original stamps from the chosen authorities and not photocopies.

You must send your original English language certificate or an officially attested copy. We require evidence of your English language ability in the form of a recent IELTS, TOEFL or WELT test and we will not accept other English language tests.

In order to ensure your application is processed quickly, please check that you have done the following:

- Filled in all the relevant sections on the form
- Provided us with 2 references
- Included previous degree transcripts
- Provided us with your research proposal
- Included an English language certificate (if appropriate)
- Included any additional documentation required by the department (see department’s entry in the Postgraduate Prospectus)
- Signed and dated the declaration

The Progress of Your Application

All applications for postgraduate study are processed through Postgraduate Admissions and forwarded to the relevant department for consideration. Course Selections return their decisions to Postgraduate Admissions who inform you of the outcome. Research applications are normally turned around within 6 to 8 weeks of receipt.

The decision sent to you will be either:

- An unconditional offer which means you satisfy all the academic conditions required before entry and we are offering you a place.
- A conditional offer which means that you do not yet satisfy the academic conditions required before entry but you propose to do so. The conditions are given in the offer letter
- We are unable to offer you a place

If you are currently completing your first degree or have not yet taken a required English language test any offer of a place will be conditional upon you achieving this before you arrive at Warwick.