Master of Business and Project Management in Industrial Automation

FLEXIBLE, LIVE AND INTERACTIVE ONLINE LEARNING - PARTICIPATE FROM ANYWHERE IN THE WORLD
LEARN FROM INDUSTRY EXPERTS WITH REAL-WORLD EXPERIENCE

WHAT YOU WILL GAIN:

- Skills and credibility in Project Management in Industrial Automation
- Advanced skills and knowledge in the latest advanced technologies in industrial automation, for professional or highly skilled work and/or further learning
- Practical know-how from practising experts with demonstrated ability
- Credibility as an advanced practitioner in industrial automation
- Ability to make independent judgements and high level decisions in a variety of technical or managerial contexts
- Knowledge and skills to be actively involved in planning, implementation and evaluation stages of a range of functions in specialised industrial automation projects
- A fully accredited Master Degree in Business and Project Management

PART-TIME, INTENSIVE DISTANCE LEARNING
OVER 24 MONTHS

COMMENCEMENT DATE: 24th OCTOBER 2011
ENROLMENT DEADLINE: 3rd OCTOBER 2011
“The material just confirms to me what I have always known, that your work on developing and running teaching schemes are most ambitious and of good quality, and maybe better that what many others have.”

Professor Karlos Artto
Aalto University, Finland

“The MBPM is a very good idea and the program is very well structured and aligned to business needs. Almost everyone agrees that Project Management is a combination of science and art.”

Hiroshi Tanaka, President of Global Project Management Forums, President of Japan Project Management Forum, April 2005

“Good reputation, had attended good full-time courses previously.” Worley Parsons

“Course facilitator CV, ...reputation, e-learning flexibility.” SMK, New Zealand

“Course interest and content.” ABB, Australia

“Non-vendor specific training and lower course costs with online training capabilities.” Worley Parsons

“I can do those courses at my own free time which made it more convenient for me.” Iluka, Australia

“Content was applicable to my job and industry. Taught by industry experts not academics. E-room delivery mode. Accreditation in various nations.” Sanofi Pasteur, Australia

“Covered all my criteria and gave me recognised qualifications on completion.” Netafim

“Course content seems practical and applicable. I already have a BSc where the focus is on the theory.” BHP Billiton, South Africa

“Industry recognition and recommendation by colleagues.” Rio Tinto

“Seemed the most convenient option, and it was!” CPIT, New Zealand

“Course content ease of study option.” Nestle, South Africa

“Its international recognition with body endorsing certification. Easy to attend lessons after work hours. Easy way of course payment.” Kinyara Sugar Ltd, Uganda

“Offer the correct course, timing and affordable cost.” Folec, Brunei

“Believed to be good quality based on previous training courses I have done in person.” BHP Billiton, South Africa

“The course that I am currently enrolled in also had all the outcomes I was looking for to further my career.” Rio Tinto

“The course content was relevant to my work environment and practical.” Alcoa

“I have done a few courses in the past and found them to be very good and delivered by people with practical knowledge of the subjects.” Kalgold

“It provides good online course delivery including its quality support structures.” OneSteel

“The fact the I could do it online and it was in line with furthering my knowledge for work.” CAED, Australia

“It ticked all the boxes ... quality, suitability, depth, length.” Powerco, New Zealand

“Course was visible and relevant.” Schneider Electric, UK

“The most practical and technical offerings by the most qualified instructors for distance learning.” Encana Natural Gas

“On-line references, price, and various time frames available to sit in on the class. Also, one more important item was being able to converse with the instructor and class instead of working totally on my own.” Mitchell Technical Institute

“Course content Accreditation of the training institution. Cost.” MODEC

“Possibly the most recognised online institution within my industry.” DRA, South Africa
CONTACT US

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Dean of Engineering—EIT

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INFORMATION

Master of Business and Project Management Speciality in Industrial Automation

- Presented by distance learning (live web and video conferencing)
- Part time over 24 months
- Four semesters per year
- 12 weeks per semester
- Commences 24th October 2011
- Enrolments close 3rd October 2011

For more information on applications or enrolments, please contact us at:

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E: apicollege@apicollege.edu.au

Engineering Institute of Technology  
T: +618 9321 1702  
F: +618 9321 2891  
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www.apicollege.edu.au  
www.eit.edu.au
Welcome to the Master of Business and Project Management

Dear Colleague,

It is our pleasure to welcome you to the Master degree in Business and Project Management focussing on Industrial Automation. As its title suggests, this is an advanced program in Project Management in Industrial Automation and is ‘reasonably unique’ in the world. This Master degree has been produced after considerable research into what an engineering professional working in the industrial automation field really needs to help achieve the final steps up the career ladder.

We believe the unique flavour of this course is the linking of project management, a key part of all engineers and ‘technologists’ working careers, to that of industrial automation. This Master degree focuses on the practical issues of industrial automation that will confront an advanced practitioner in the field. For example, you will be exposed to the design concepts and issues of best practice in instrumentation and control. You will also be expected to undertake advanced project management, design and conceptualisation work. Some of the work and study you will be undertaking will involve pioneering technology and exploring new approaches.

Two institutions have teamed up together with synergies in each area – the Engineering Institute of Technology with a strong Industrial Automation technical expertise with hundreds of thousands of students worldwide over the past two decades and the Asia Pacific International College which has developed an outstanding highly regarded range of internationally presented Project Management Master degrees over the past decade.

An added feature of this program is that in using web collaborative technologies you will not only study and work with your peers around the world on various industrial automation design projects, but conveniently and flexibly from your desktop using the latest techniques in live web and video conferencing and thus you do not have to leave your workplace to attend this highly interactive course.

You only need to look at the huge number of job openings in industrial automation and project management to know that there is a definite ongoing need for highly qualified and skilled specialists in project management and especially in industrial automation. Upon completing this program you will be able to show technical leadership in the field of industrial automation and be recognised as an advanced practitioner.

An innovation of this program is that it serves both as an up-skilling and cross-skilling mechanism. Students from a discipline such as Mechanical Engineering could complete the program to up-skill and cross-skill to Industrial Automation Project Management.

In summary, this high level practical Master degree is based on:
- Outstanding lecturers with relevant, real-world, industrial automation and project management experience
- Excellent materials with useful industry applicable theory
- State-of-the-art, live, lecturer led e-learning presentations to present and interact; no matter where you are in the world
- Using our marketing and contacts to gather an outstanding group of students who are keen and enthusiastic to learn from each other
- Ensuring you get the best value for money by squeezing the costs down using the latest Internet, online and publishing technologies

Please take your time to study and compare our programs and contact us for further advice. We would be delighted to talk with you about furthering your career.

Regards,

Dr Steve Mackay  
BSc(ElecEng), BSc(Hons), MBA, MMR, PhD, CP Eng, FIE (Aust)  
Engineering Institute of Technology

Professor Ali Jaafari  
PhD, ME, MSc, FIE Aust, CEng  
Asia Pacific International College
WHO SHOULD ATTEND

Anyone who wants to gain solid knowledge of Project Management and the key elements of industrial automation to improve their work skills and to further their job prospects:

- Electrical Engineers
- Maintenance Engineers and Supervisors
- Instrumentation Engineers
- Energy Management Consultants
- Automation and Process Engineers
- Design Engineers
- Project Managers
- Electricians and Instrument Fitters with sufficient experience
- Consulting Engineers
- Production Managers
- Chemical and Mechanical Engineers
- IT Professionals
- Instrument and Process Control Technicians

ASIA PACIFIC INTERNATIONAL COLLEGE IS A FORMALLY REGISTERED AUSTRALIAN HIGHER EDUCATION INSTITUTION

ENGINEERING INSTITUTE OF TECHNOLOGY ACCREDITATION STATUS

The Engineering Institute of Technology (EIT) is an institute for higher learning. It has emerged from its founding organisation, IDC Technologies, which is an international provider of practical, technical training. Since its inception in 1991, three hundred thousand engineers, technicians and technologists have been trained globally. The EIT has received recognition, endorsement and/or accreditation (which varies by course and location) from authorising bodies based around the world. These include:

IEEE Education Partner - the world’s largest professional association advancing innovation and technological excellence. The EIT is an IEEE Continuing Education Provider.

The Training Accreditation Council - A body established under an Act of Parliament in Australia to provide for the quality assurance and recognition processes for Registered Training Organisations and Accreditation of courses. National Code 52310

The Institute of Measurement and Control - United Kingdom - Britain's foremost professional body for the Automation Industry.

South Africa - The EIT has obtained validation for CPD Points from the SAIMechE (South African Mechanical Institute), COET (Chamber of Engineering Technology) and SAIEE (South African Institute of Electrical Engineers), who are Voluntary Associations recognised by ECSA (Engineering Council of South Africa). To view the list of our validated courses and programs, visit ECSA's website www.ecsa.co.za and refer to the CPD Activities.
WHY STUDY PROJECT MANAGEMENT?

Engineers and technologists are not and have never been mono-discipline practitioners. The reality is that engineering is just one competency among multiple competencies professional engineers and technologists of today need to possess.

This fact has been illustrated by many studies, such as the study conducted by Morris and Dixon on behalf of the Association for Project Management (APM) in the UK (2000) in which around 120 companies participated. 100% of respondents agreed on the need for leadership, legal awareness and procurement to be included in the APM list. The next top 5 areas down the list in descending order were: safety, health and environment (99% agreement), life cycles (98%), purchasing (96%), risk management (95%) and financial management (94%). As noted the managerial and leadership skills topped the list in this survey.

In 2002 Professor Jaafari and his students conducted a survey of perceived competencies of engineers and allied professionals at the University of Sydney. This study found that leadership and socio-cultural competencies were rated of critical importance, on a par with project management competencies as per the diagram below.

![Perceived required competencies](image)

Technical competencies are generally acquired as part of the discipline or industry in which one is grounded, such as instrumentation engineering, mechanical and electrical engineering and so on. Few engineers, scientists and technologists continue to develop their managerial and leadership competencies systematically. It is always assumed that they will acquire such vital skills on the job or through the employers’ sponsored training schemes. Though a few employers may actually pay attention to development of their professional engineers and scientists or technologists; unfortunately this is not the case universally.

The extent and intensity of project management and leadership competencies required changes, depending on the person’s orientation and context. For example, an electrical engineer needs to possess project management competencies to the extent that he or she can appreciate the business context, project goals and objectives, project parts and functions, and how his/her input relates to the broader project mission and business needs and requirements. They also need to participate in project conceptualisation endeavours and furnish his expertise of electrical engineering or make significant expert contribution to the evolution of integrated solutions in multi-discipline teams. All of these require both project management and leadership competencies. To summarise, engineers, scientists and technologists need to exhibit three types of competencies in an integrated fashion:

**Project Management competency** is needed by all professionals in order to participate in, and or manage business and or government endeavours, particularly focusing on hard aspects, users’ validated performance targets, financial targets, time, production requirements, safety, health and environmental protection etc. Thus, project management competency is a required core competency for virtually all classes of engineers, scientists and technologists (note that over 95% of all services and products in engineering and technology-based industries are delivered through projects).

**Leadership and socio-cultural skills** are also needed by all professionals in order to develop self, relate to social structures in teams, projects and business units or in wider sense of leading organisations, as well as promotion and adherence to strong personal and professional ethics. These competencies focus on the soft aspects and human and organisational cultures.

**Technical competencies** are also essential, and go hand in hand with other key competencies. Technology plays a key role in competitiveness of ventures and business endeavours. That is why this program aims to further enhance the technical expertise of the participants and immerse them in the commercial and technological dynamics of the field. A project manager who is active in the culture and arts field is not sufficiently knowledgeable to engage in the instrumentation or electrical engineering industry and vice versa. This program has been designed to impart and enhance the participants’ technical and technological expertise in an integrated manner alongside the dimension of project management, leadership and socio-cultural competencies.
COURSE STRUCTURE

This innovative Master degree comprises 15 units and is structured to be an intensive part time one running over a period of 7 semesters of 12 weeks each; with a one week break between semesters. The Vocational Graduate Diploma component is completed within the 4 semesters (first year). Students who successfully complete the first 9 units will be awarded with the Vocational Graduate Diploma of Industrial Automation by the EIT. The Master Degree is awarded by APIC at the end of the seventh semester on successful completion of all 15 units. You need to invest 15 to 20 hours per week (comprising online lectures, assignments, lab and simulation work, collaborative team work and self-study in the program) to optimise the value you obtain from it. The structure of the Master Degree does provide some flexibility; in that you can defer units due to work commitments and continue when more appropriate for you.

<table>
<thead>
<tr>
<th>Course Structure</th>
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<tbody>
<tr>
<td>Units 1 to 9 are presented by the Engineering Institute of Technology.</td>
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<tr>
<td>Semester 1</td>
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<td>Unit 1</td>
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<td>Unit 2</td>
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<td>Unit 8</td>
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<td>Unit 9</td>
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<tr>
<td>Completion of Vocational Graduate Diploma* in Project Management (Industrial Automation)</td>
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<tr>
<td>Candidates need to complete the following units of study presented by APIC in order to satisfy the requirements of the Master of Business and Project Management Degree:</td>
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<td>Semester 5</td>
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<td>Unit 10</td>
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<td>Unit 13</td>
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<td>Semesters 7 &amp; 8</td>
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<td>Unit 14</td>
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<td>Unit 15</td>
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<td>Total 75 credit points</td>
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*Accreditation of Vocational Graduate Diploma is pending. Master of Business and Project Management is a formally accredited Australian degree at University level.
International Expert Faculty:
Your team of professional presenters and facilitators are drawn from experts in their field. They will work closely with you for the duration of the course.

GUEST SPEAKER - EIT
Richard E. Morley — Father of the Programmable Logic Controller

Richard E. Morley, best known as the father of the Programmable Logic Controller (PLC), is a leading visionary in the field of advanced technological developments. Mr. Morley is a member on the Board of Directors of various companies across the United States and has worked in high tech industries since the beginning of solid-state electronics. He is currently Chairman of the Board of NCMS (National enter for Manufacturing Sciences) and has a proven track record in the founding of successful high-tech companies for where he provides initial product concept and a continuing technological presence. He is a nationally recognized expert in the field of computer design, artificial intelligence, automation and is an authority on the factory of the future.

Mr. Morley is an engineer, consultant and inventor. His inventions include the PLC (Programmable Logic Controller), which now stands in the Smithsonian Institute. He holds more than twenty United States and foreign patents. Mr. Morley is well known as a lecturer, has written extensively for such publications as Manufacturing Systems magazine and Manufacturing Automation magazine. He has published many works of his own. His latest book, 'Out of the Barn', was published in October 2002 and another book, 'The Technology Machine', was published in September 1999. Mr Morley founded the angel investment group; the Breakfast Club. He is currently an active member with this group of investors having participated in more than 100 startup companies in the New Hampshire area. He was the former Director of Advanced Technologies for Gould, Inc. He is a Gould Fellow of Science and Engineering, a Fellow of SME, Bios LP and ICS. In addition, he was awarded the 1990 Entrepreneur of the Year by Inc. magazine, Merrill Lynch and Ernst and Young.

He is a 1991 recipient of The Franklin Institute’s Howard N. Potts Medal, and holds the Prometheus Medal placing him into the Automation Hall of Fame. International IEN ranked him 3rd in the “Top 100 Most Significant Industrial Products of the 20th Century” for his work with the PLC. In October 1999, ISA (Instrumentation, Systems and Automation Society) honoured him with the "Life Achievement Award" and Fortune magazine awarded him their "Heroes of Manufacturing Award" in March 2000. Recognized as one of the giants in the field by the Engineering Society of Detroit, he has extensive experience in high-tech consulting and is involved in new product development at the highest management levels. Currently he works out of his barn in New Hampshire where he and his wife have been home to more than two dozen foster children.

GUEST SPEAKER - EIT
Dr. Peter Fuhr PhD
Chairperson, Wireless Industrial, Networking Alliance, Co-Chair, ISA100 WG5, Wireless Coexistence and Interoperability, Congressional Panel on Nanotechnology, USA

Dr. Peter Fuhr has been involved in secure industrial wireless sensing systems for longer than he cares to admit. During his 20 years as a university professor, he embedded sensors into various structures worldwide ranging from buildings, dams, airplanes, hot air balloon, spacecraft, nuclear power plant containment vessels, even humans. He has published/presented over 700 technical articles pertaining to wireless, sensors, and secure SCADA systems. His pioneering work in networked sensor systems for structures earned him the President Award for Excellence in Research.

Segments of his research activities are featured in the SPIEMilestone Series on Fiber Optics. Dr. Fuhr has served as the President and Chairman of the Wireless Industrial Networking Alliance and is the Distinguished Scientist for Oak Ridge National Laboratory. Dr. Fuhr chairs numerous standards and technical committees including, ISA100.5/6 Industrial Wireless coexistence/Interoperability, ISA100.21 Industrial Real Time Location Services, ISA100.19 Wireless for Nuclear Applications; IEE 1451.7, IEE 1777 (Provisional) Wireless for Electric Utilities; Congressional Panel on Nanotechnology; Subject Matter Expert for the Smart Grid. In addition he Chairs the Association for Advanced Agricultural Technology and has presented before the U.S. Congress on Secure SCADA and Industrial Wireless Automation Systems.
International Expert Faculty:

Dean of Engineering
Dr Steve Mackay  BSc(ElecEng), BSc(Hons), MBA, MMR, PhD, CP Eng, FIE (Aust)

Steve has worked in engineering throughout Australia, Europe, Africa and North America for the past 30 years. He has presented numerous industrial automation and industrial data communications courses worldwide to over 18,000 engineers and technicians, and has a particular interest in practical and leading edge aspects of marketing, business and engineering practice. He is the Dean of Engineering at the Engineering Institute of Technology, a growing engineering training and education firm which has been operating from offices throughout the world since 1992. He has also acted as the author or editor of over 30 engineering textbooks sold throughout the world. He feels that all engineering businesses need to think globally and keep experimenting with new approaches. Currently, he is actively involved in research and implementation of remote lab technology.

Dean Of Graduate School of Business and Project Management - APIC
Dr. A. Jaafari, ME (Dist), MSc (Dist), PhD (Citation & Award), FIEAust, CPEng Professor and President, Asia Pacific International College Honorary Professor, the University of Sydney (Formerly Chair Professor of Project Management and Director of Programme)

As a long time international consultant, author, researcher and educator in project, program, business and systems management Professor Jaafari has wide expertise and professional experience. He has authored 190 publications in project, program, organisations and business management and acts as an expert consultant to industry and governments worldwide. He has acted as a special consultant on the Productivity Initiative Programme (PIP) and has delivered courses, workshops and training programs to more than 5,500 professionals in public institutions, government agencies and industry sectors. Professor Jaafari has more than 30 years of academic experience, most of it as a senior academic at the University of Sydney's Faculty of Engineering, as well as 16 years of professional engineering and management experience in Australia, Europe and the Middle East. He has also worked with SMEC in Australia, involved with multiple projects and programs including Project Director of the Hazardous Waste Transport Project in NSW, Australia. The current research focus of Professor Jaafari and his team at the Asia Pacific International College is on creation of the next generation of project management models and systems, diagnostic tools for assessing individuals, complex projects and programs and project-based organisation units.

LECTURER
John Lawrence  BSc (Hons) MSc BCom (Hons)

In today’s hyped up world, one is hesitant to describe anyone as ‘outstanding’, but John Lawrence has distinguished himself over the last 15 years with excellent course reviews. John has 20 years of experience as a project and departmental manager for a multinational oil company, focusing on designing and managing the infrastructure of the telecommunications, data communications and IT systems. In the past 5 years, John has worked extensively for a number of multi-national clients, managing projects including facilities management, budgeting and financial forecasting. When John is not consulting or lecturing, he enjoys increasing his own skills by reading and writing about state-of-the-art technology topics and how to optimise Return On Investment (ROI) for the overall IT infrastructure. John is a dedicated professional who has trained engineers and technicians throughout the world.

LECTURER
Deon Reynders  BSc Eng (Hons)(Elec), MBA

Deon has had over 25 years experience in automation, data communications (with a focus on industrial applications) and Ethernet TCP/IP networks. He has specific experience in Systems Engineering, Project Management and software and hardware development. Currently he is retained as a consultant to industry in the TCP/IP, industrial Ethernet networking, OPC and the industrial data communications areas. Deon is a practical, hands-on person and a highly entertaining speaker. He has received excellent reviews from his thousands of course participants in regions ranging from Europe, North America, Africa and Australia. He takes great pride in demystifying difficult concepts and presents them in a simple-to-understand manner. He is a passionate, enthusiastic and knowledgeable professional engineer.
## International Expert Faculty:

### LECTURER
**John Westover** BSc ChEng, M Eng Sci (Process Integration)

John has been a practicing engineer since 1981, primarily in the oil and gas industry. His career has taken him from Rocky Mountains and the Arctic Coast of Alaska to various locations in Australia, with several stops in between. He has previously worked for both owner/operators such as Amoco and BP and the engineering company, Fluor and has first hand understanding of the unique needs and requirements of various stakeholders. He first earned the respect of his operations and maintenance co-workers when he proved some thermocouples were not working properly – he had to wear a safety harness and climb a 35-tray distillation column outside the ladder cage to get some data (the data verified his theory). After reaching the age of 40, John completed his Masters degree, specifically looking at how process integration could be systematically used to reduce the weight of offshore platforms (which resulted in a paper for the Society of Petroleum Engineer). Since then his career has started to transition into training and mentoring roles. In 2006 he started working for himself, doing engineering studies, risk assessments, and delivering training. John has delivered training courses in Australia, New Zealand, and Asia. In addition, John has delivered webcasts into all continents around the world (including Antarctic territory). John is a staff member of Monash University. He has also developed remote training modules for operations and maintenance personnel for a facility expansion with new technology in Pakistan.

### LECTURER
**Edward J Tooher** BSc Eng (Hons), MPM

Edward Tooher is a renowned Engineering Executive, a Certified Practicing Project Director and a Corporate Member of the Engineers Australia. He is a well known trainer and consultant in project management with vast experience and holds a Master of Project Management from the University of Sydney. He has over thirty years experience in the provision of management consultancy services to government and commercial clients, engaged over a wide range of asset planning, land disposal, building, heavy engineering, transport, health, information technology and management of change projects. He has particular experience in major campus redevelopment involving operating entities and in the release of capital from asset sales for business improvement. His work has also included large scale facility planning for major corporations. Edward also lectures extensively in project management and related fields at four Universities.

### LECTURER
**Professor Suresh (Serge) Kumar Mukhi**, BE, GradDip, MBA, PhD, MIEAust, FAIM, MAITM

Professor Serge Mukhi is an experienced senior academic with more than 30 years of academic experience in Australia and internationally in business, strategic management, leadership and change management. Serge is a fractional Professor of Management at The University of Fiji. He was Foundation Professor of Management special advisor to the Vice-Chancellor on international relations at the University of Technology, Sydney. Until the end of 1999, Serge was Pro-Vice-Chancellor (External Affairs) at UTS, responsible for all external activities of the University, both national and international. Serge has over 30 years experience in managerial skills training in both the private and the public sectors. He has been a Visiting Fellow at the Harvard Business School in the United States and the Cranfield School of Management in the United Kingdom – working in areas of organisational behaviour and strategic management. Prior to joining the University, Serge spent over 10 years as project engineer, developmental manager and strategic planner with a number of Australian organisations.
ABOUT THE ENGINEERING INSTITUTE OF TECHNOLOGY

The Engineering Institute of Technology is a private Registered Training Organization. EIT is a sister company of the well known and reputable engineering training organisation, IDC Technologies. IDC has been operating for over 20 years, from offices throughout the world, delivering practical short courses to well over 300,000 engineers and technicians. The finest engineering lecturers, with extensive real engineering experience in industry, are drawn from around the world. The learning is delivered to students through a blend of synchronous and asynchronous online (e-learning) technologies, which includes live lectures and remote laboratories. The EIT offers education awards in a growing array of engineering fields.

Many (perhaps, most) engineering faculties at universities and colleges experience a significant challenge delivering the course-work affordably and with excellence. The EIT achieves this using online based education – economical class sizes are attainable, international experts are engaged to instruct and remote laboratories and simulation software are employed. Many institutions offer online training, with no interaction or practical components and composed mainly of self study and perhaps supplied recordings. This format offers very little in the way of motivation or practical skills and can leave students feeling isolated. The live, interactive format of the EIT’s online programmes, which allow expert lecturers to present from anywhere in the world, to anyone in the world, and students can interact and socialise with lecturers and fellow students. Students not only have access to international expert lecturers, but are provided with a worldwide network of peers. The EIT’s online learning provides cost-effective, flexible training with no compromise on quality.

ABOUT ASIA PACIFIC INTERNATIONAL COLLEGE

Asia Pacific International College is internationally renowned for excellence in teaching and applied research in project, program, portfolio, organisation and business management. The College is focused on both formal postgraduate degree programs and industry relevant executive courses. All degree programs are formally accredited at University level by the respective education authorities in Australia. The College is formally registered by the government as a degree awarding Australian Higher Education Institution.

Postgraduate students select the College to develop themselves because of the quality of the College’s programs, unique delivery methodology, industry relevance and formal recognition. Starting with the first cohort of graduates the College has consistently enjoyed high satisfaction ratings and is proud of the graduates’ achievement. The formal degree programs currently offered by the College are listed below together with the industry streams and majors where applicable:

**Project Management Graduate Program:**
- MBA (Project and Program Management)
- Master of Business and PM
- Graduate Diploma in PM
- Graduate Certificate in PM
- Executive Diploma in PM
- Individual (tailored) programs

**Business (General Management) Graduate Program:**
- MBA (Project and Program Management)
- Master of Business Management (MBM)
- Graduate Diploma in BM
- Graduate Certificate in BM
- Executive Diploma in BM
- Individual (tailored) programs

**Industry Streams (both PMGP and BMGP):**
- Construction and Infrastructure
- IT and Services
- Mining, Energy and Processing
- Manufacturing and Production

![Figure 1: The learning laboratory for management education and training](image-url)
APIC has developed unique practical educational programs, tools and learning systems that constitute an integrated learning laboratory (Figure 1).

APIC recognises that in the knowledge-rich economy effective competition is largely dependent on the organisation’s ability to tap the intellect and energy of its people to come up with innovative products and services to meet the customers’ needs in a cost effective manner. Success is mainly dependent on the people’s capabilities as well as business models, tools and support systems. That is why APIC has chosen deliberately to work in the heart of industry to take the latest knowledge and managerial tools to managers and to stage training programs that will deliver results for the organisation.

APIC has already completed a range of industry-based training and consulting assignments with the aim of improving the performance at individual, project, program, operation and organisation level. APIC has developed a suite of unique diagnostic tools and systems that have been proven invaluable in actual applications in terms of shedding light on the priority areas and actions needed to address the issues identified.

Note that tools applied by APIC for individual staff assessment, project/program health assessment and organisational diagnostics are aligned and integrated. The integrated approach enables holistic enterprise assessment and development, aligning different change management activities along the way.

**Gain**
Skills and credibility in Project Management in Industrial Automation

**Learn**
Practical know-how from practising experts with demonstrated ability

**Develop**
The ability to make independent judgements and high level decisions in a variety of technical or managerial contexts

**Apply**
Knowledge and skills to be actively involved in planning, implementation and evaluation stages of a range of functions in specialised industrial automation projects

**Receive**
A fully accredited Master degree in Business and Project Management

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**Benefits of Distance Learning**

We understand that many individuals have tough obstacles to furthering their education, including family commitments, full time careers, financial and geographical limitations. By using the latest technology and software, we provide flexible, affordable programs whilst retaining interaction, engagement and top quality tuition.

**Distance Learning Allows You To:**
- Upgrade your skills and refresh your knowledge without having to take valuable time away from work
- Receive information and materials in small, easy to digest sections
- Learn from almost anywhere - all you need is an Internet connection
- Have constant support from your program lecturers and coordinator for the duration of the program
- Interact and network with participants from around the globe and gain valuable insight into international practice
- Learn from international industry experts

“It seemed the most convenient option, and it was!”
Unit 1 - SBM1201 - Project Management Fundamentals Project Scope, Time and Cost Management

Unit Overview
This unit aims to develop basic project management competency with focus on the following three core project/program management knowledge and competency areas, in accordance with contemporary standards such as A Guide to Project Management Body of Knowledge (PMBOK), NSCPM and IPMA International Competence Base. The unit covers the following:

- Project scope planning, evaluation and change management: deliverables in project phases, alignment of outcomes with strategic intent and business cases; definition of the system, tools, processes and competencies needed to assess scope and integrate project/program elements, including value assessment and optimisation across project/program life cycle
- Project time planning, scheduling and progress management: appropriate levels of control and assessment of project progress against the schedule; time management strategies, defining milestones, conducting planning and sequencing of activities; developing coordinated schedules and resource plans and applying typical computer software in planning and time optimisation
- Project cost estimating, budgeting and financial management: cost estimation, planning and control, cash flow determination and finance, as well as defining means, frequency and manner of change management in a systematic manner; exception reporting, cost forecasting and managing cost variances, reporting and management of contingency budget and generally a good command of financial management of project/program

Learning Objectives
Upon completion of the course, the student should:

- Demonstrate knowledge and basic competency in relation to scope and change management on projects, as per the PMBOK requirements
- Demonstrate knowledge and basic competency in relation to scheduling and time management applying appropriate tools and techniques
- Demonstrate knowledge and basic competency in relation to financial management including cost planning, budgeting and variation/change management
- Apply knowledge and tools to projects in the work environment including setting up relevant systems and controls

Credit points: 6

The Unit Will Cover:
1. Introduction
   - Defining project management
   - Introduction to project scope, time and cost management
   - Project scope management
   - Discussion of tutorial work, focus on business results

2. Scheduling
   - Project time and resources management
   - Project scheduling, progress monitoring and control
   - Project tools and systems for time planning, scheduling and progress control

3. Budgeting and Cost
   - Project cost management
   - Project tools and systems for estimating, budgeting and cost control
   - Project performance assessment and management

4. Summary and Revision
   - Revision and test preparation
   - Reinforcing learning outcomes and application to team project
   - Written test on fundamentals of project scope, time and cost management
   - Feedback

For the purposes of learning project/program fundamentals in an integrated and meaningful manner, students will assume responsibility for developing a detailed plan (covering strategic assessment, initiation, planning, execution and close out) for a single case project.

In order to spread the load, different areas of the case project will be addressed in the different units respectively, though the eventual Project Plan that emerges from the team’s work should be a holistic and balanced solution NOT a collection of disaggregated plans.
Unit 2 - SBM1202 - Project Quality, Risk and Procurement Management

Unit Overview
This unit of study focuses on 3 core project/program management knowledge and competency areas, namely (1) project quality management; (2) project risk management; and (3) project procurement management. The aims are to develop basic project management competency with focus on these core areas. In short, students are to develop fundamental knowledge and competency with respect to:

- Project/program quality management
- Project/program risk management
- Project/program procurement management
- Integration of project/program quality, risk and procurement management

The Project Management Body of Knowledge (PMBOK™) treats quality, risk and procurement management as the facilitating areas of project management, in other words used as tools to achieve the scope, time and cost objectives. APIC treats these as tools to achieve the greater goals of the project in terms of financial targets, performance targets and environmental targets. In other words, the focus is shifted from project management to project outcomes and from execution to whole of project life cycle.

With respect to project quality management the focus will be on designing and applying an optimum quality management master plan covering the entire project life cycle and using that deriving quality management plans to cover each of the phases of the project/program under consideration in a manner that maximises the attainment of the project business case in an efficient and effective manner. At the highest level quality management activities will have to form part of the overall project administrative and governance plans. However, QM has to address the work that is contributed by any contractor/supplier at any phase and to ensure that the quality of works and services supplied meets or exceeds the targets sets during the strategic phase of the project.

With reference to project risk management the focus will be on the delivery of the project business case and achievement of the project objectives. This will shift the focus of risk management from the rather limited view of managing risks during the project/program execution phase. It is treated as a creative and exploratory process to guide the project team in learning new insights about the project and means of mitigating exposure to risk and liabilities. Considering procurement management, the focus will be on the delivery of the business case and the achievement of the project objectives. It will discuss the process for optimum procurement management including complete contractual strategy, design and delivery framework for projects/programs. It includes understanding and designing frameworks for project delivery and supply chain, developing procurement strategies and processes spanning soliciting bids, assessing bids and awarding contracts, on-going contractual management and all associated activities. This unit is fundamental to understanding the crucial role of quality, risk and procurement management functions as tools in minimisation of deviations to project goals and maximisation of the chances for successful realisation of project/program deliverables and outcomes.

Learning Objectives
Upon completion of the course, the student will be able to:

- Demonstrate knowledge and basic competency in relation to project/program quality management
- Demonstrate knowledge and basic competency in project/program risk management
- Demonstrate knowledge and basic competency in relation to project/program procurement management
- Apply tools/techniques to projects/programs in the work environment, including setting up relevant systems and controls to manage quality, risk and procurement functions in each phase in an integrated manner

Credit points: 6

The Unit Will Cover:
1. Introduction
   - Overview of project/program quality management over project life cycle phases
   - Project/program quality management
   - Project quality management

2. Risk Management
   - Introduction to project/program risk management
   - Review of project/program risk management
   - Project/program risk management

3. Procurement Management
   - Introduction to project/program procurement management
   - Review of project/program procurement management
   - Project/program procurement management

4. Summary and Revision
   - Self and peer competency assessment on project/program quality, risk and procurement management
   - Revision and preparation for test
   - Reinforcing learning outcomes and application of the same to forthcoming team project
   - Conduct of written test on fundamentals of project quality, risk and procurement

For the purposes of learning project and/or program fundamentals in an integrated and meaningful manner, students will assume responsibility for developing a detailed plan (covering strategic assessment, initiation, planning, execution and close out) for a single case project.

In order to spread the load, various areas of the case project will be addressed in the different modules respectively, though the eventual Project Plan that emerges from the team’s work should be a holistic and balanced solution NOT a collection of disaggregated plans.
Unit 3 - GIA01A - Industrial Process Instrumentation

Unit Overview
The focus of this unit is on industrial instrumentation with an emphasis on principles. Industrial instrumentation is a unit that will discuss the main types of instrumentation, principles of measurement and specialised services.

The Unit Will Cover:
1. Application of Electronic Instrument Systems and Analysis of Circuits
   - Introduction to instrumentation
2. Measurement Principles
   - Errors and uncertainties
   - Analogue instruments
   - Digital instruments
3. Sensors for Transducers
   - Potentiometers and transformers
   - Piezo electric based sensors
   - Photoelectric
   - Capacitance sensors
   - RTDs
   - Other sensors
4. Signal Conditioning Circuits
   - Basic principles
   - Resistance type strain gauges
5. Force, Torque and Pressure Measurements
   - Technical details of each application
6. Displacement, Velocity and Acceleration Measurements
   - Introduction
   - The seismic transducer
   - Dynamic response
   - Other transducer applications
7. Analysis of Vibrating Systems
   - Introduction
   - Sinusoidal signal analysis
   - Characteristics of signals
   - Vibration models
   - Digital analyser
8. Temperature Measurements
   - Physical principles
   - RTDs and thermocouples
   - Radiation
   - Introduction
   - Physical principles
   - Closed systems, partially closed systems and open channels
   - Specialised applications
10. Statistical Methods
    - Introduction
    - Statistical distributions
    - Confidence intervals
    - Regression analysis
    - Error accumulation and propagation

Credit Points: 3
Learning Objectives
This unit is designed to ensure students:
- Develop a deeper understanding of industrial instrumentation
- Are able to specify appropriate instrumentation for industrial automation processes

On successful completion of the unit students will be able to understand:
- Principles of industrial instrumentation
- Instrumentation technologies
- Relevant standards for instrumentation
- Control and instrumentation
- Safety instrumentation
Unit 4 - GIA02A - Industrial Process Control Systems

Unit Overview
This unit addresses plant layouts, functional specifications, piping systems and fundamentals of process control. Control is revisited not only to ensure that students have a good foundation but because control is central to industrial automation. This is a practical oriented unit that addresses engineering application issues.

The Unit Will Cover:
1. Plant Layout and Considerations
   - Major process equipment in the process industry
   - Appreciation of material flows (mass, temperature, pressure)
   - Issues to consider in layout

2. Piping Considerations
   - Pipes and pipelines (differences and similarities)
   - Design of pipes
   - Introduction to line sizing
   - Material of construction

3. Standards used in the Process and Instrumentation and Control Industry
   - The need for standards and important industry standards
   - Legislative considerations in design

4. What Constitutes a Functional Specification
   - Various drawings
   - Importance and content of drawings

5. Instrumentation Overview
   - Flow, level, pressure and temperature instrumentation types
   - Specialised instrumentation
   - Physical appreciation of instrumentation used in industry
   - Principles of control valves

6. Safety Fundamentals
   - The need for safety
   - Safety legislation
   - Safety processes and systems
   - Safety in design
   - Hazard identification

7. Fundamentals of Process Control
   - Process variables and set points
   - Feedback control
   - Instrumentation and control
   - Control implementation

8. Fundamentals of Process Control
   - Elements of dynamic analysis
   - Model and dynamic behaviour of linear systems
   - Time delay systems frequency response

9. Developing a Functional Specification for a Project
   - Understanding the process
   - Understanding the drawings
   - Plant layout and piping
   - Electrical line diagrams
   - Instrumentation

Credit Points: 3

Learning Objectives
This unit is designed to ensure students:
- Develop a deeper understanding of industrial processes and requirements
- Prepare a functional specification document

On successful completion of the unit students will:
- Be familiar with various documents that form a functional specification document
- Develop process plant layouts
- Understand the fundamentals of control
- Understand industrial standards
Unit 5 - GIA03A - Programmable Logic Controllers, SCADA and Distributed Control Systems

Unit Overview
Programmable Logic Controllers (PLCs) are now widely used in all types of process industries for automatic control of operation on a real-time basis. These devices can handle complex operational functions of mechanical – electrical devices in, say, machining, packaging, materials handling or other automated industrial operations. This unit looks at PLC hardware and programming methods and industrial applications. Students will gain theoretical and practical knowledge on real life PLC programming by means of suitably translating the process algorithm to associated programming language. The skills acquired include knowledge about selection of input and output devices for interfacing with PLCS, networking options, programming abilities as well as installation, commissioning and maintenance of PLCS. Students will practice PLC programming on real-life industrial control through simulation software.

The Unit Will Cover:
1. PLC Hardware and Software
   - Basic block diagram
   - Size and components of PLC systems
   - PLC and process interaction
   - Number systems and codes

2. Processor, Memory, Power Supply, Programming Devices
   - Introduction to PLC hardware
   - Processors (CPU)
   - Memory system
   - PLC power supply
   - Programming devices

3. Digital and Analog Input Output System
   - Basic types of discrete I/O systems
   - Discrete field devices
   - Discrete Input and Output modules
   - Basics of analog I/O systems
   - Analog field devices, input devices and output modules

4. Fundamentals of PLC Programming
   - PLC programming steps and languages
   - Basic logic instruction
   - Timers and counters
   - Program flow control instructions
   - Data load transfer instruction
   - Arithmetic or math instructions
   - BT and advanced PLC functions
   - Networking PLCS

5. PLC Implementation in Real World
   - How reliable is our equipment?
   - Project planning and key questions
   - Two key strategies
   - The people!
   - Primary loop control and interlocking
   - Field devices and communications
   - PLC incorporated on DCS structure
   - PLC system options
   - Costs and utilities
   - Spare PLCS
   - I/O allocation
   - Backing up current plant data
   - Power supplies

6. Special Function I/O and Intelligent Peripheral Devices
   - Fast response input module
   - Counter module
   - Stepper motor positioning module
   - Future directions with smart instruments
   - Highway Addressable Remote Transducer (HART)
   - ASCII communications devices
   - Intelligent communications devices

7. PLC Installation – Good Practices
   - PLC modules and rack
   - PLC panel internal wiring and power supply
   - Cabling between PLC and field devices
   - Cabling PLC and control room computers
   - PLC earthing and control room requirements

8. High Security PLC Systems
   - Safety systems concepts
   - Resistance to random hardware failures
   - Architectures for safety PLCs
   - Objections to standard PLCs used for safety
   - Characteristics and design of safety PLCs
   - Hardware and software characteristics of a safety PLC
   - Redundant architectures for PLCs – high availability with high integrity
   - Application software for safety PLC

9. SCADA Systems Hardware
   - Considerations and benefits of SCADA systems
   - Remote terminal units
   - PLCs used as RTUs
   - System reliability and availability

10. SCADA Systems Software and Protocol
    - Components of a SCADA system
    - DCS and SCADA software package
    - New technologies in SCADA Systems
    - Twelve Golden Rules
    - OPC

11. DCS Controller and Configuration
    - Identification of the controller boards
    - Discrete, logic, sequential and batch control
    - Control modes
    - Tracking and initializing in control slots used for cascade control
    - Control functions and control algorithms
    - Sequential programs for batch processing
    - Defining equipment procedures
    - Phase logic programming and interface
    - Logic block functions in advanced controller

Learning Objectives
On successful completion of the unit students will be able to:
- Select PLCs and associated interfaces based on controls to be achieved
- Select SCADA and DCS systems and associated interfaces based on types of process supervision and data acquisition to be achieved
- Convert process algorithm into programming instructions and uploading on PLC for execution of controls
- Identify PLC needs and specification for advanced process control purpose
- Understand data communication needs for processes using multiple PLCs connected over network
- Understand ladder logic programming for simple batch and sequential process control
Unit 6 - GIA06A - Industrial Data Communications

Unit Overview
Data communications in all its facets, be that analog or digital, wired or wireless, underpins the operation of an entire plant. This unit will focus primarily on wired data communications, with emphasis on the older RS-232/RS-485 standards, as well as the more modern Ethernet standard, and the TCP/IP protocol suite. After completion of this unit, students should be able to design serial and Ethernet based communications infrastructures to operate in an IP environment, assist in commissioning such systems, and perform or supervise basic troubleshooting.

The Unit Will Cover:
1. Introduction and OSI Framework
   - Introduction to industrial data communications
   - Terms and definitions
   - The Open Systems Interconnect Model
2. Cabling and Noise
   - Noise
   - Shielding
   - Grounding/Earthing
   - Copper cable alternatives
   - Optical fiber alternatives
3. Serial Data Communication Principles and Standards
   - Basics of asynchronous serial communications
   - RS-232
   - RS-422
   - RS-485
   - 4-20 mA
   - Bell 202
4. Introduction to Protocols
   - Protocol concepts
   - BSC
   - HDLC
   - File Transfer Protocols
5. Ethernet
   - 10 Mbps variants
   - 100 Mbps variants
   - 1 Gbps variants
   - Medium access control
   - Hubs, switches, routers, gateways
6. TCP/IP Protocol Suite
   - Network layer protocols
   - Transport layer protocols
   - Application layer protocols
   - Utilities
7. Modbus
   - The Modbus concept
   - Modbus serial implementation
   - Modbus TCP implementation
   - Simulation

Credit Points: 3

Learning Objectives
The broad aims of this unit are to ensure students:
- Acquire knowledge of how the communications infrastructure is affected by noise, and measures that can be put in place to combat the problem.
- Appreciate the overall context in which data communication systems operate.
- Develop competency in specifying Ethernet and TCP/IP-based systems.
- Develop an understanding of how upper-level protocols such as Modbus are transported by the lower-level protocols.
- Develop skills in troubleshooting Serial as well as Ethernet/TCP/IP-based systems.

On successful completion of the unit students will be able to:
- Explain the functionality and relevance of the various data communication technologies in terms of the OSI Reference Model
- Understand the nature of serial data communications, with particular reference to RS-232 and RS-485
- Design, put together and troubleshoot Ethernet networks down to the packet level
- Understand the TCP/IP protocol suite, configure IP, and troubleshoot the protocols such as ARP, IP, ICMP, TCP and UDP down to the packet level
- Understand the basics of Modbus, and observe the operation of both Modbus Serial and Modbus TCP at the packet (message) level
Unit 7 - GIA07A - Management of Industrial Automation Projects

Unit Overview
This unit focuses on the formulation and delivery of industrial automation projects. This unit of study will be approached in a case study format as follows. An industry expert will define the latest theoretical approaches and best practices from the perspective of (typically systems integrator type) firms operating in this space, including tools and systems used to manage such projects from tender or design stage through to the delivery, hand over and commissioning phase.

Students will then be tasked with either analysing a few complex case projects or in planning the management of a major complex case project that has been partially defined and designed.

The overriding approach is to learn how to plan and manage scope, time, cost, quality, risks and procurement in an integrated manner applying the respective best practice methods to these type of projects.

The project work involves first researching and mapping the current industry practices on the selected case projects and then comparing these to the idealised (best practice models) that each student team extracts or constructs from the respective literature or standards or other sources (including students’ own designs).

This study will lead to tangible learning outcomes in terms of how to approach formulation (or tender preparation) of such projects, where the risks may lie, what is the specific knowledge that industrial automation project planners/managers ought to know and apply. The students will also come up with tools or templates that can be used to manage such projects, develop training modules for project administration and management.

At the conclusion of this unit, the students will become thoroughly familiar with the current industry practices, critique the same and develop improved solutions that can be adopted by the respective firms.

The Unit Will Cover:

Industrial Automation Projects A
- Review of generic project management requirements
- Definition of best practice in industrial automation projects
- Tools and systems used to manage these projects
  - Case Study - Analysis of complex industrial automation projects
  OR
  - Case Study - Planning of the management of a major complex project
- Review of students submissions and feedback

Credit Points: 6

Learning Objectives
The broad aims of this unit are to ensure students:
- Develop a deep understanding of formulating and delivering industrial automation projects
- Are able to apply scope, time, cost, quality, risk and procurement best practice to these type of projects

On successful completion of the unit, students will be able to understand:
- Tools and systems used to manage projects from tender to hand-over
- How to analyse an industrial automation project from a project management perspective
- Differences between current industry practices and idealised best practice models
- Allocation of risk from tender to hand-over of projects
- The optimum tools and templates to use
Unit 8 - GIA08A - Processes, Tools and Templates for Management of Industrial Automation Projects

Unit Overview
This unit will focus on organisational processes, tools and templates that are needed to manage industrial automation projects from a managerial perspective. Students will learn the fundamentals of designing processes, tools and templates. The facilitator (typically an enterprise project management consultant) will guide students in terms of design or adoption of processes, tools and templates. There are various tools that will be tailored to the business under consideration that will essentially provide clear processes and procedures for gathering of data, storage and processing of data, generation of reports in accordance with recognised standards or best practice models or new innovations on management of industrial automation projects and given their unique characteristics, risks and requirements.

Students will do the above work in a team format (4-6 people) and use a given company as the base for their design or simply assume they are forming their own company and want to bid for and manage such projects successfully in practical terms.

Using the tendering process shown here as an example, students will then take each step and detail it as a process or methodology and define what input, output and tools and techniques they need to design or adopt to execute the respective steps and ensure success. The diagram below shows an example of the whole process for bidding and delivery of a given scope of works and students will learn how to contextualise this to industrial automation projects.

Student teams will then write up their project work and present their bids to a panel who will in a simulated way, determine who the winners are and give feedback to the teams.

Credit Points: 6
The Unit Will cover:

1. Fundamentals of designing
   - Processes
   - Tools
   - Templates

2. Typical strategies in design or adoption of processes, tools and templates

3. Case study
   Either a given company
   Or formation of student's own company to bid and manage projects

4. Step of PM process
   - Definition of input, output, tools and techniques required

5. Preparation of report

6. Presentation of bids to panel

7. Feedback to students and conclusion

Learning Objectives
The broad aim of this unit is to ensure students develop a deep understanding of optimal organisational processes, tools and templates for project management

On successful completion of the unit, students will be able to understand:
- Optimal organisational processes, tools and templates
- Fundamentals of designing processes, tools and templates
- What input, output and tools and techniques are needed for each step of the PM process
Unit 9 - GIA09A - Integrated Management of Health, Safety and Environment (HSE)

Unit Overview
Safety systems engineering embraces a range of well established techniques deployed to reduce the risk of hazardous events such as explosions and toxic emissions in industrial plants. In the industrial automation field the most significant topics are the provision of functional safety systems to reduce the likelihood of a serious hazardous event and the protection methods used to avoid ignition in areas where flammable atmospheres can arise. In this unit the student will review the common safety philosophy of hazard identification, risk management and risk based design of protection methods. The unit will prepare students for a practical and challenging application project typical of those currently seen in large chemical processing plants. Three primary but interrelated subjects are presented in this unit. These are: hazardous atmosphere classification and associated protection methods for instruments, the practices of hazard studies including the widely used HAZOP methodology, and the application of safety instrumented systems for risk reduction. Principles and practices in all three subjects will be closely linked to the best internationally accepted engineering standards and practices.

The learning outcomes for the unit will provide the level of understanding and competency required for an engineer to take responsibility for design of hazardous area installations and for safety control system projects. Learning in HAZOP methods will equip students to participate effectively in HAZOP study sessions and to prepare for a leadership role. Students will be required to complete a series of short practical exercises in the various stages of the safety lifecycle such as area classification, hazard identification and analysis study, SIL determination, SIS design and SIS reliability calculations.

The Unit Will Cover:
1. Safety Systems
   - Safety management principles
   - Principles and classification of flammable atmospheres
   - Engineering standard IEC 60079 for hazardous atmosphere practices

2. Safety Systems
   - Protection methods including intrinsically safe Fieldbus concepts.
   - Maintenance and competency requirements for Ex systems

3. Safety Systems
   - Hazard identification in automated plants
   - Hazard and Operability Study (HAZOP) method and HAZOP leadership
   - Worksheet reporting form using Excel

4. Safety Systems
   - Hazard analysis methods and LOPA modelling
   - Brief study process hazard situation with fault tree analysis
   - Layer of protection analysis model development using Excel formatted software

6. Safety Systems
   - Safety Integrity Level (SIL) determination
   - Development of the safety requirements specification

7. Safety Systems
   - SIS configuration and equipment selection
   - Principles of safety certified PLCs and high integrity application software

8. Safety Systems
   - SIS performance evaluation and reliability modelling
   - Calculation practical and development of Excel spreadsheet tool

9. Safety Systems
   - Validation, testing and maintenance of SIS installations
   - SIS project launch meeting

10. Safety Systems
    - SIS project consultations

11. Safety Systems
    - SIS project preparations

12. Safety Systems
    - SIS project presentations and assessments

Credit Points: 6

Aims and Objectives
The broad aims of this unit are to ensure students develop:
- Knowledge of safety system practices and the principles of risk reduction by design
- Appreciation of the role of automated control systems as a contributor to risk and as a means of reducing risk in hazardous plants
- Competency in the project planning and implementation of safety instrumented systems
- Understanding of the relationships between safety management and engineering methods employed to reduce risk
- Skills in hazardous area classification, explosion protection methods such as IS design, hazard studies and risk assessment, HAZOP study participation, SIL determination, SIS design and reliability performance evaluation

On successful completion of the unit students will be able to:
- Specify and design instrumentation systems for installation in classified hazardous areas and in accordance with the international IEC 60079 series standards
- Plan and execute a safety control systems project in accordance with the safety life cycle requirements of the internationally recognized standard IEC 61511
- Evaluate cost effective safety instrumentation system solutions for risk reduction in hazardous processes and justify the investment to the operating company
- Develop training and competency growth programmes to enable a company to comply with the functional safety management requirements of IEC 61511
Unit Overview
This unit places major emphasis on understanding the processes of professional development and competency acquisition. Most practitioners associate competency with task dexterity and job-related skills, which is referred to as ‘normative skills’. The question is how relevant and valid normative concepts are in today’s environment of change and uncertainty. Competence is about autonomy; self reference and group self organisation, i.e. the relatively enduring qualities that empower professional people to perform well individually and in groups despite prevalence of complexity and rapid change. It must be underpinned by strong personal and group Ethics.

The Unit Will Cover:
1. Fundamentals
   - Introduction to course aims, objectives, target competencies, learning strategies, resources available, timetable and deliverables, assessment methods and related briefings
   - Briefing on how to conduct each phase and the entire unit of study
   - The environment, mega trends and the rise in complexity and change and impact on individuals and organisations
   - Envisioning the future and setting of realistic goals
   - Ethics and professional conduct
   - Group work and class discussion on the impacts of change on individual professionals and businesses
   - Competency assessment and setting of professional goals
   - SWOT analysis and development of strategies to aid own professional development in an optimum manner

2. Group work, Summary and Feedback
   - Lecture and group work: peer and group assessments
   - Working with APIC’s tools and systems
   - Group work: consolidating and aligning individual learning and development challenges
   - Presentation and discussion: groups to present their findings
   - The way ahead: scope for individual assignment
   - Continuous progress monitoring and improvement
   - Student feedback and conclusion

SOCIO-CULTURAL AND PERSONAL COMPETENCIES
The socio-cultural and personal competencies are common across all units of study offered by APIC and are tracked throughout the program. These are as follows:

- Generic: All competencies that are common to all professionals (including cognitive and communication abilities, problem solving and analytical mindset)
- Leadership: Ability to direct, motivate and manage individuals and teams
- Commitment: Ability to dedicate to tasks and to project outcomes.
- Attitude: Ability to create the right frame of mind that promotes integrity and support for achievement of project goals within a social context.
- Self Direction: Ability to manage within and without guidelines and processes, and to work without supervision.
- Learning: Ability to commit to continuous improvement in knowledge, skills and attitude, and to creating new knowledge developing skills and approaches
- Cultural Empathy: Ability to respect for and accommodation of individual lifestyle, beliefs and norms
- Creativity and Innovation: Capacity to generate new ideas/approaches and make them happen

Credit Points: 3

Aims and Objectives
The broad aims of this unit are to ensure students:
- Understand how to conduct environmental scanning and blue sky thinking
- Understand how to assemble and analyse mega trends generally and in specific industry branches
- Learn and apply principles of ethics and ethical conduct
- Define/refine your professional goals and set development targets
- Conduct SWOT analysis and develop optimum strategy
- Conduct broad competency assessment in respective areas
- Develop personal learning and development plan
- Define key performance indicators (KPIs) and metrics to assess progress against plan
- Compile and submit your L&D plan
- Apply L&D plan to continually improve yourself
- Manage and enhance own professional competencies

Assignment phase
This unit of study requires every student to extend and expand on the knowledge learnt during the course. Each student needs to prepare and submit two assignments that will be assessed and graded formally:

- An essay to explore all aspects of professionalism and ethics focusing on socio-cultural, leadership and personal competences
- A personal learning and development plan that conforms to the L&D Plan Specification that will be distributed during the course

Students must pass both components. Individual students may be required to attend an oral examination to validate their L&D plan
Unit 11 - SBM1102 - Project/Program Human Resources, Teams, Communication and Integration Management

Unit Overview
This unit of study focuses on 3 core competency areas relevant to project/program management, namely: (1) project human resources assessment and organisational design including human dynamics, leadership and team management; (2) communication management; and (3) project/program integration management. The aims are to develop basic competency in project human resources management, communication and teamwork management and integration management, reflecting the state-of-the art practice and in line with recognised Standards such as A Guide to Project Management Body of Knowledge (PMBoK). This unit has a major emphasis on effective team design and management; it will focus on assessment of team competency gaps as well as effective approaches for the development of the missing competencies using a systematic approach. Further, team dynamics will be studied and techniques for assessing team roles will be presented and applied. Participants should thus gain basic competency on how teams are forged, optimised and managed under challenging conditions. There will be opportunities to apply the teamwork principles throughout the MBPM course and thus learn the art of forming high performance teams through engagement in the same. Considering communication management, the focus is not only on defining means, frequency and manner of communications among project participants and affected stakeholders but also learning styles and development of synergy among team members.

Communication, information and documentation management will be considered systematically for effective communication management. This unit is fundamental to understanding the crucial links that need to be established between project objectives, team capabilities, management control processes and quality management processes on projects. Considering integration management the main challenge is to ensure that decisions on all areas of the project are properly integrated and optimised and this is often achieved through development of an integrated plan embracing all other project processes, systems and contents. Integration management involves project plan development, project plan execution and integrated change control. Earned value management is the normal basis for performance monitoring and change management. In addition, integration of the project processes and the works of the project as well as the integration of project and the pertinent operations of host organisation are studied.

The Unit Will Cover:

1: HR and team management on projects and programs
   - Understanding project/program human resource requirements in each phase
   - Developing human resources policy, motivation and project charters
   - Assessing competencies and developing training schemes to improve individual competencies
   - A review of team, structure, operation and mode
   - Introduction to learning styles
   - Project responsibility allocation and communication reporting fundamentals
   - Project team building fundamentals (formal teamwork instruments as well as team dynamics assessment and management)
   - Team formation and assessment by students

2: Communication management
   - Understanding the fundamentals of information and communication requirements, including both formal and informal reporting
   - Relationship between communications, integration and quality management functions on projects/programs and the need for a holistic approach
   - Case study of the communication and information management approaches

3: Integration Management
   - Fundamentals of project/program integration management
   - Plan development, execution and progress monitoring
   - Integrated performance control and change management
   - Class case study work: how to develop an integrated plan
   - Class discussion of integration of project, works, host organisation business and the use of IT systems to aid the same

4: Revision, testing and feedback
   - Assessment of individual competencies in integration, HR and teamwork, as well as communication and information management
   - Sample PMP test conducted, assessed and discussed
   - Reinforcing learning outcomes and application of the same to forthcoming team project
   - Conduct of written test on fundamentals of project human resources planning, communication and integration management

Credit Points: 6
Aims and Objectives
The broad aims of this unit are to ensure students:
- Can demonstrate knowledge and basic competency in relation to management of project human resources and communication functions on projects
- Are able to assess and balance teams, determine learning styles, develop formal team work plan and internal QA procedures, and generally monitor teamwork effectiveness, communication and performance
- Develop basic competencies in determination, integration and management of communication and documentation needs over project life, and build systems to manage the same Know how to develop plan, execute the same and apply integrated change control processes
- Can apply knowledge and tools to simple projects in the workplace, in particular in building high performance teams
Unit 12 - SBM1101 - Project/Program Management Strategic Intent, Business Case, Framework and Governance

Unit Overview
This unit of study will provide definitions of project and programs, business units and links between them. A thorough understanding of the strategic goals and context is vital to successful design and implementation of projects and programs. Considerations of environmental and project complexities will lead to better focus on achievement of goals and management of risks and uncertainties. The strategic intent and project contexts will be analysed with a view to understanding and confirming the project business case on commencement but also in terms of continual re-evaluation and realignment of projects and programs in a dynamic way. Project and program life cycles will be presented and discussed. Different business imperatives (needs and requirements) will have to be considered in each project/program phase. Project governance over project life cycle is thus directed by these needs and available governance options. The design and implementation of appropriate governance structures vis-à-vis project/program strategic needs and requirements will thus be a major focus in this unit of study.

The Unit Will Cover:

1: Introduction
- Introduction to course aims, objectives, target competencies, learning strategies, resources available, timetable and deliverables, assessment methods and related briefings
- Introduction to project and program terminologies
- Introduction to strategic management
- Understanding characteristics of projects, programs and differences, with particular emphasis on life cycle phases and interrelationship
- Business results and strategic integration

2: Business Case
- Project/program business case determination, assessment and management
- Defining corporate or business goals, strategy and their relationships or links to projects and programs, design of KPIs to assess linking and alignment
- Techniques (e.g. balanced scorecard) for performance assessment of project and programs in meeting target KPIs or specific strategies and goals
- Business case determination, assessment of project performance vis-à-vis target KPIs
- Design of project/program frameworks and processes
- Work on business case determination of a simple project/program and class discussion

3: Governance
- Design of governance structures for management of projects and programs from the client/sponsor’s perspective (project/organisation design, governance models, team structures and reporting and control mechanisms)
- Coursework regarding framework and governance design for assigned simple project (all students to work on a single project)
- Design of governance structures for management of projects/programs from the contractor perspective, including assessment of the same vis-à-vis contractual commitments and obligations, stakeholders, safety, health and environmental management obligations
- Design of governance design from a contractor’s perspective
- Comparison of sponsor and contractor’s governance structures

4: Assessment, Summary and Feedback
- Assessment of individual competencies WRT project/program strategic intent, business case, framework and governance over each phase of project/program life cycle
- Reinforcing learning outcomes and application of the same to forthcoming team project
- Conduct of written test on management of project/program strategic intent, framework, governance structures and associated administrative arrangements

Credit Points: 6

Aims and Objectives
This unit of study aims to impart a thorough understanding of systemic and holistic project and program management. The unit will target the following studies:

- Project and program management definitions and terminologies
- Goals, strategy and strategic management at business unit level
- Project/program life cycle models and their relationship to strategic management
- Project business case determination, documentation
- Linking and evaluation processes to assess and realign projects and programs to their respective goals and strategies
- Project governance and decision making over project life cycle
- Monitoring and health checks of project/program governance over project and program life
Unit 13 - SBM1103 - Project and Program Information and Communication Systems

Unit Overview
Information and communication technologies (ICT) play a key role in successful development, staging and ongoing management of projects and programs. Thus, all project and program managers and directors as well as experts participating in projects and programs need to be thoroughly versed in effective utilisation of ICT. Nowadays there are multiple choices of information and communication systems, ranging from fairly simple technologies such as email to more advanced systems offering a multitude of channels of communications as well as decision analysis and optimisation. The thrust of this unit is to develop competencies in the design of appropriate information technology infrastructures for projects and programs in order to facilitate real-time communication and collaboration as well as effective virtual teamwork.

The array of technologies available is immense. Professionals in charge of projects and programs need to select and optimise the most appropriate ICT strategies and ensure that these will work to engender teamwork and collaboration, act as quality tools, maintain information and documentation records, protect against potential unauthorised access and so on. The optimality of the choice and actual design of ICT infrastructure must be systematic and based on the business value rather than sophistication of the relevant technologies. This unit of study will focus on the underpinning principles, framework for analysis of the available options, selection and installation of the relevant systems as well as training and induction of the staff interacting with the system on a frequent basis.

The Unit Will Cover:

1: Information and communications needs and options
- Introduction to course aims, objectives, target competencies, learning strategies, resources available, timetable and deliverables, assessment methods and related briefings
- Project/program information and communication needs over project/program life cycle phases
- Tutorial on information and communication needs
- Data and document standardisation through protocols and ICT media
- Building consensus on information and communication needs, formats, frequency, mode and responsibility
- Developing options and narrowing the list down to the promising options from typical solutions

2: Acquisition of information and communication systems
- Evaluation (e.g. cost-benefit analysis) and selection of the optimum solution
- Development of system diagrams and specifications plus other essential information for system acquisition and utilisation purposes
- Pitfalls associated with ICT systems acquisition and installation
- Class discussion on system acquisition and utilisation

3: Effective utilisation and on-going improvement
- Information and communication management processes, protocols and users training, relationship to quality management processes and systems
- Training and induction, with particular emphasis on promoting information sharing, timely communication and effective decision making
- Ongoing ICT system evaluation and improvement using appropriate KPIs

4: Reinforcing learning outcomes, knowledge tests and feedback
- Assessing current competencies in project/program information and communication systems
- Sample test conducted, assessed and discussed
- Reinforcing learning outcomes and application of the same to forthcoming team project
- Conduct of written test on fundamentals of project/program information and communication systems

Credit Points: 6

Aims and Objectives
The broad aims of this unit are to ensure students have:

- Sound knowledge of the available technologies and ICT solutions typically applicable to projects and programs
- Competency in assessment of information and communication needs and requirements in each phase of projects/programs
- Competency for data capture and standardisation, over project/program life cycle
- Competency in document standardisation, sharing and archiving processes
- Know how to conduct cost-benefit analysis of the ICT systems and selection of an appropriate system for each case project/program
- Competency in projects re-engineering, benchmarks and testing
- Competency in risk analysis; management roles and technology interfaces
- Know how to set up effective computer-based teamwork and collaborative framework, particularly during design and planning processes where computer-based modelling may play a vital role in the project solution optimisation
- Competency in developing staff and team skills in the effective utilisation of ICT systems to achieve order of magnitude performance improvements on projects/programs
Unit 14 - SBM1203 - Venture/Project Economics and Finance

Unit Overview
Money is the life blood of economy. Understanding, modelling and managing the finances of projects/programs and ventures are fundamental to achievement of successful business outcomes. Project/venture economics and finance belong to a branch of knowledge that is used very widely for the analysis of alternatives, formulation of financial strategies and decision making on virtually all investments. Thus, it is really at the core of quantitative management and capital budgeting. This unit of study will equip students with insights and tools for financial appraisal and decision optimisation. It aims at imparting the basic knowledge and competencies required in project appraisal and financial management applicable to all sectors of industry and business, including services, business investment, R&D, capital projects and projects in local, state and national government departments and agencies. Students are encouraged to learn to apply the tools to analyse projects, programs and ventures. The foundation sciences are compound interest rate mathematics and the family of techniques broadly known as Discounted Cash Flow (DCF) techniques. Coverage includes Equivalent Uniform Annual Cashflow (EUAC), Present Value (PV), Internal Rate of Return (IRR), Benefit-Cost Ratio (BCR) as well as Bonds and Debentures, Depreciation, Replacement, Valuation and Capital Budgeting techniques.

The Unit Will Cover:

1. Introduction
   - Case study presentation
   - Introduction to project/venture financial appraisal
   - EUAC technique
   - Tutorial work on fundamental frameworks and approaches to financial appraisal and simple EUAC problem
   - Class discussion of tutorial outcomes
   - Net present value technique
   - Tutorial work on NPV technique

2. Bonds, debentures and IRR
   - Bonds, debentures, debt and other financial instruments
   - Tutorial work on bonds and debentures
   - Internal rate of return and its application range
   - Tutorial work on IRR
   - Benefit cost ratio
   - Tutorial work on BCR technique

3: Depreciation, valuation and capitalisation
   - Depreciation, valuation and capitalisation studies
   - Tutorial work on depreciation, valuation and capitalisation studies

4: Assessment, Summary and Feedback
   - Individual competency assessment in venture/project economics and finance
   - Reinforcing learning outcomes and application of the same to forthcoming team project
   - Conduct of written test on fundamentals of venture/project economics and finance

Credit Points: 6

Aims and Objectives
Students should be able to carry out basic project appraisal, financial planning and value engineering tasks. It is expected that students will develop skills in decision making regarding analysis of alternatives, financial budgeting and project capital decisions. More specifically students should demonstrate:

- A sound understanding of financial modelling, analysis and interpretation techniques
- Ability to design and orchestrate actual project/venture appraisal studies
- Ability to understand and prudently apply techniques of depreciation, valuation, replacement and associated analysis
- Ability to develop criteria for appraisal and optimisation that incorporate not only financial returns but also community and stakeholders’ benefits

Teamwork phase
A structured learning program will be applied; in summary form it will comprise:

- An overall process for venture/project economics and finance studies on case project as per typical approach advised in the unit’s website;
- A program of the learning activities which are part of student’s team work plan and individual competency acquisition needs. All teamwork activities are to be conducted within the Master Schedule as advised in the unit’s website (detailed schedules are to be developed and submitted as part of the Team Work/QA Plan)
- The Brief is available as downloadable files. Your team needs to follow this Brief carefully and submit all its work as per format specified

![Diagram of Demand and Supply](Image)
Unit 15 - SBM1300 - Research Project

Unit Overview
This is a research project that students conduct under supervision. Students select a topic (preferably related to a real life project, or organisation or industry sector or education and training), develop a research plan, conduct the respective research, write a paper in accordance with the guidelines provided and present a seminar on their topic to the examiners. Students may select their topics in consultation with their assigned supervisors. The total time permitted for the conduct of this activity is one semester (14 weeks). SBM1300 needs to be completed by all Master Degree candidates successfully to be eligible for the award of the respective degrees. It is an independent ‘un-timetabled’ unit of study that is conducted by students upon completion of a minimum number of prescribed units of study. Students should have completed the equivalent Graduate Diploma units of study or have the equivalent knowledge prior to enrolment in this unit.

The Research Project is conducted in 4 phases. Phase 1 focuses on exploration of the literature on the topic chosen, selection of the appropriate theories for the study of the topic and development of a research methodology. Students work either individually or in teams of 2 to 3 under close supervision to develop a research proposal. This is presented to the supervisor and after feedback it is finalised by the team. Phase 2 concerns the fieldwork, i.e. conduct of the actual research activities planned and gathering and consolidation of the data needed to cover the scope of research. Phase 3 focuses on the analysis of the data, compilation of results and testing of the respective hypotheses, conclusion, and writing of the draft project report, submission to the supervisor for comment and feedback, followed by the final submission of the finished project report. Phase 4 is oral examination of individual students and the formal assessment of their written dissertation by the supervisor as well as moderation of the same by a member of the faculty to ensure consistency and thoroughness.

Aims and Objectives
The broad aims of this unit are to ensure students understand:

- Research methods and techniques
- Literature review and critical appraisal techniques
- Data modelling and evaluation techniques
- Development and testing of hypotheses
- Interpretation and documentation of findings
- Presentation of the results
- Other aspects of conducting research

Credit Points: 6
Target competencies in this unit of study comprise the following:

- Design of research methods and techniques
- Conduct of systemic literature review and critical appraisal techniques
- Modelling and evaluation techniques
- Formulating and testing hypotheses
- Interpreting and documenting the findings
- Presenting the results
- Management of the whole research process
Live, Interactive Distance Learning—How Does It Work?

This program is delivered using interactive distance learning, involving live, on-line webinars, simulation software, remote laboratories and self-study assignments. This flexible approach means that you can participate from anywhere in the world - the only requirement is Internet access.

Each unit will involve live, interactive webinars presented by one of our expert lecturers, as well as set readings, tutorials, or question and answer sessions, plus assignments and project work. You will have access to your program resources and materials 24 hours a day, through our student portal and have support from a dedicated program coordinator.

Live Webinars From Your Desktop

During the program you will participate in short, live webinars with lecturers and fellow students from around the world. Whilst recorded presentation are provided, live interactive sessions provide a superior learning experience, providing opportunities for questions, immediate feedback and sharing ideas. Our user friendly webinar software is provided upon registration as well as a live tutorial to get you started. You will be able to interact with other participants via chat, voice or video (depending on bandwidth) throughout each webinar.

Practical Exercises, Simulation Software and Remote Labs

Hands-on experience is critical to gain a thorough understanding of the concepts. As part of this new groundbreaking way of presenting programs, we use a variety of remote laboratories (labs) as well as simulation software to facilitate your learning and to allow you to test your knowledge gained during the program. These involve complete working labs set up at various locations of the world into which you log and proceed through a practical session. The labs and simulation software are designed to increase the absorption of the materials and to give you a practical orientation of the learning experience. We also use simulation software, running on your computer (or remotely) to ensure you gain the requisite hands-on experience.
Learning Management System
You will have personalised access to our online student portal for the duration of the course. Here, you will be able to access the latest news, program materials, assignments, and notices of schedule changes as well as access to chat rooms and forums 24 hours per day. You will also be able to access grades, receive assignment feedback, share information and files with other students and interact with lecturers.

Individual Personalised Profile

Access course materials, submit assignments, interact with fellow students and lectures through forums and live chat
Assessment
In order to complete the course successfully, you need to pass each unit as well as the Research Project. For each unit you will be assessed on written assignments, individual and/or group work, online quizzes and webinar participation. Attendance at a minimum of 70% of unit webinars is not only paramount to your performance in the course, but compulsory. You will be able to access full recordings of all presentations.

Resources and Materials
The course includes a range of learning materials and resources including:

- Detailed unit outlines
- Electronic reading materials
- Online students and instructor led forums
- Webinar recordings
- Live chat-rooms
- Access to course lecturers

Students will have access to the EIT’s extensive online library which contains:

- Technical e-books
- Whitepapers
- Videos
- Technical software
- Students will also receive access to an additional electronic library: Academic OneFile, which contains over 13,000 indexed journals covering physical sciences, technology, medicine, social sciences, the arts, theology, literature and other subjects.

APIC also provides access to over 26,000 resources, including academic journals, technical magazines, monographs and conference publications.

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LIVE e-Learning—Innovative, Flexible and Cutting Edge Education

**Flexibility** - Upgrade your skills without having to take valuable time away from work

**Easy-to-Digest** - Information and materials received in small, easy to digest sections

**Accessibility** - Learn from almost anywhere - all you need is an Internet connection

**Support** - Have constant support from a dedicated course coordinator and lecturers

**Interact** - Network and interact with participants and lecturers based around the world

**Expert instruction** - Learn from international industry experts with real-life experience
ADMISSION REQUIREMENTS

Applications are considered on a case-by-case basis, however suitable applicants should be seeking to achieve advanced know-how and expertise in Project Management in industrial automation, electrical and instrumentation engineering. Admission to the MBPM degree is subject to the candidates meeting specified criteria. As a minimum, a bachelor degree (or equivalent) in an applicable discipline is required. Candidates without a bachelor degree may be admitted to the MBPM candidature provided they have completed the Graduate Diploma course or an equivalent course at other institutions or otherwise possess qualifications that can be considered as meeting the flexible entry requirements.

Potential students include:

- Practising engineers or technologists with advanced knowledge, experience and education (such as a 3 or 4 year bachelor’s degree)
- Practising electrical and instrumentation technologists or engineers with demonstrated competence and interest in industrial automation
- Engineers or technologists from another discipline (such as mechanical and chemical engineering) wanting to up-skill in this area
- Individuals who have successfully completed the advanced diploma in industrial automation and cemented this with extensive practical experience in electrical and instrumentation engineering

For more information, applications or pre-requisites, please contact our course advisors at enquiries@eit.edu.au

Why Consider Postgraduate Education?

A postgraduate qualification such as a degree or diploma can have a huge impact on your career and employment prospects. Postgraduate surveys have often confirmed that individuals with postgraduate education not only have higher salaries, but also find employment much more quickly and spend more time overseas in desirable locations for employment. Successful students also graduate with access to a wider professional and industry network, with good quality employment contacts.

Employers recognise that students who have completed postgraduate education have much deeper knowledge, more independence and ambition as well as the ability to make higher level decisions. They also develop better time management skills and are more accountable and responsible in the workplace and hence they are more desirable candidates. There is no doubt that postgraduate education will help your employment prospects, and assist in your professional and personal development.

Exemptions and Recognized Prior Learning

Credit exemption is not guaranteed but will be assessed on the merits of the application. It is critical that anyone undertaking the MBPM has an excellent grasp of fundamental automation concepts and applications (as a minimum), such as those presented in the Advanced Diploma of Industrial Automation course offered by the EIT.

Weekly Commitment

The time required for the program depends greatly on your existing knowledge and experience. It is an intensive course and the material is at postgraduate level. We estimate that you would need 10 to 15 hours per week, on average, to successfully complete the program. This includes live webinars, scheduled activities, projects, assignments and readings. Obviously your time investment and dedication are directly linked to your results.
FREQUENTLY ASKED QUESTIONS

Why study with the EIT and API College?
The EIT have been actively engaged in running engineering courses throughout the world for over twenty years with outstanding feedback and results. API College have been actively presenting Master degrees since 2004. All these programs have been accredited by the Australian Federal Government and both API College and the EIT go through regular stringent quality checks.

What is the difference between this online program and those from other universities or institutions?
We create a dynamic learning environment which is to be distinguished from some commonly found non-interactive (asynchronous) delivery methods where students are generally left to their own devices, resulting in feelings of isolation, lack of motivation and higher drop-out rates. In this program you would be assured of live, synchronous and frequent interaction with your lecturer and fellow students that will be inspiring and enriching. We use technology effectively to link you with your instructors in real-time and enable you and your fellow students to communicate closely with them and with one another to acquire fresh thinking, new knowledge and heightened perspectives in this process.

What should I say to my employer to get support for this course?
In today’s fast moving world, our experience leads us to believe that employers are normally actively supportive of further study especially in project management and technically related disciplines which make an active contribution to their effectiveness. You may find that your employer will either partially refund your fees or request successful completion of each module before assisting financially. Employers are also delighted with the fact that their employees do not need to leave work to attend these online learning courses.

If the course is being presented by distance learning does this mean it is second rate?
There is no doubt, that there are an enormous amount of poorly presented online or distance learning courses. However, our research and proven results over the past five years, shows us that live, online learning can be considerably more powerful and effective than traditional face-to-face learning. And in fact, we believe that this is fast becoming obvious with the rapid take-up of online learning at even traditional residential universities. It is vital that the online experience is of the highest possible standard. Something we believe we excel in.

What are the advantages of studying online?
We know that many potential students have part or full-time employment as well as family commitments, so finding the time to study a classroom-based course is not always possible. Many students also have geographical, travel and time limitations and do not have an accessible institution or training provider. We have taken this into consideration and developed an affordable, flexible, online approach to training. This means that you can study from anywhere, with minimum downtime from work – but still have the necessary interactive learning experience. The software we use does not require very fast Internet connection or a sophisticated computer. A basic broadband connection and hardware are sufficient.

How is the Master in Business and Project Management accredited?
Unlike most university and college courses, these courses are all directly accredited by the Australian Government and are recognised on a worldwide basis. In addition, we have recognition from a number of other organisations in Australia, South Africa and United Kingdom.

How much time will I need to complete the degree?
You should recognise that you do need at least 10 to 15 hours per week over two years. The more time you put into the course the better your results will be.
Do you help with study skills training?
As part of this course, we provide an introductory program on study skills in the online environment. It is vital that you develop strong study skills habits that enable you to complete the course successfully and extract every possible benefit from the MBPM.

How often does the Master in Business and Project Management degree start?
The program commences once per year.

I don’t have an Academic Qualification. Will I be able to apply?
An academic qualification is definitely not a prerequisite to entering a master degree. However, it is useful as a reliable benchmark. We will examine your industry and managerial experience in making a decision. In all cases, if you do not have an academic qualification you will be admitted to the Vocational Graduate Diploma and if you are successful here, you will be admitted to the Master degree component.

What are the fees?
The EIT provides distance education to students located almost anywhere in the world – it is one of the very few truly global training institutes. Course fees are paid in a currency that is determined by the student’s location. A full list of fees in a currency appropriate for every country would be too complex list here and, with today’s exchange rate fluctuations, difficult to maintain. Contact us for fee details.

Can I pay in instalments?
Yes, there are a range of payment options available. Contact us for more details.

Do I have to be online at specific times?
There are specific agreed times you have to be online to meet up and attend live presentations from your instructor and colleagues. We do try and negotiate times to be as easy as possible for everyone in the class (who are generally located in different time zones). Recordings of sessions are also available if you have an urgent project to attend to and can’t make the lecture sessions. We believe a key part of the learning process is to attend the highly interactive lecture sessions and indeed, to do your presentations. This is what distinguishes our program from other online programs where we believe there is a serious degradation in quality in the learning experience as a result.

Is there a requirement for residential or on-campus attendance at courses?
There are absolutely no requirements for on-campus attendance at any of the courses. However, we do supplement the program with residential sessions at our Perth and Sydney campuses and we will advise you when these are being run. These are all optional and are not a key part of the program.

Can you guarantee me a new job and a pay raise when I complete the Master in Business and Project Management?
You are the only person who understands your unique requirements in terms of the ideal job, remuneration and life-work balance. Providing any sort of guarantees at the commencement of the course would be unrealistic and dishonest on our part. However, what we do know is that there is a serious shortage of qualified project managers especially in the engineering world (including that of Project Management). This is evidenced in the job shortages in this area. Our experience with recent graduates in the Master in Business and Project Management is that promotion and a salary increase is fairly normal.

I have more questions, can I talk to someone about the program?
Yes—you can contact us by email enquiries@eit.edu.au and one of our dedicated Course Advisors will respond to you within 1 business day. Alternatively, you can contact your nearest EIT office by phone. Visit www.eit.edu.au for office locations and contact details.