IQY Technical College Masters Degree Programs

Myanmar Version _____ English Version List of EE/CE/ME/RE/ICT Subjects

IQY Technical College သည် STC Technological University/ St Clements University/ IPEM Technological University များ၏ Masters Degree များကို Engineering, Information Technology, Management, Humanities, Education လေ့လာမှုများအတွက်လည်းသင်ပါသည်။

Masters Degree in Engineering ကိုအောက်ပါအစီအစဉ်၃ခုခွဲထားပါသည်။

1. Master of Engineering Practice
2. Master of Engineering Science
3. Master of Engineering

Master of Engineering Practice သည်အလုပ်အတွေ့ အကြုံရှိအင်ဂျင်နီယာများအတွက်ဖြစ်သည်။ IQY Year 4 Professional Diploma/BE ပြီးသူများအတွက်ဘွဲ့ ရအင်ဂျင်နီယာလေ့ကျင့်ရေး (Year 5/6 Graduate Engineer Training) တွင်ပါဝင်သောဘာသာများကိုလည်းထဲ့သွင်းထားသည်။

Electrical/Civil/Mechanical /Renewable Energy သာမကအခြားလိုင်းများအတွက်လည်းသင်သည်။

Course Work 8 Subjects (Graduate Diploma in Engineering Practice) + Project (BAE709) (For Master of Engineering Practice) ပြီးရန်လိုသည်။

Self study online program ဖြစ်ပြီး Assignment/ Project /Study Report/ Analysis/ Experience Presentation/ Design Works /Job Record Presentation စသည်တို့ ကိုအဓိကထားသည်။

Master of Engineering Practice ပြီးသူတို့သည် 5 Years Experience ရှိပါက The Society of Professional Engineers (UK and International) ၏ Member (MSPE-UK & International) နှင့် Professional Engineer (UK and International) (PEng(UK and International)) လျှောက်နိုင်သည်။

Master of Engineering Practice is for experienced engineers . It will include the following subjects of 10 credits each

- BAE 701 Engineering Fundamental
- BAE 702 Engineering Management
- BAE 703 Leadership & Human Resources Management
- BAE 704 Risk Management & Industrial Safety

- BAE 705 Engineering Competency Development
- BAE 706 Engineering Report Writing
- BAE 707 Engineering Ethics
- BAE 708 Engineering Knowledge

Completion of the above subjects will earn Graduate Diploma in Engineering Practice (80 credits at Masters level +120 Credits for Bachelors degree level total 200 credits. Completion of two or more units can earn Graduate Certificate in Engineering.

The candidate will need to do BAE 709 Engineering Design Project of 40 credits to complete Master of Engineering Practice of 240 credits.

Master of Engineering Science/Master of Engineering

သည် ကျောင်းဆင်းစ BE များ၊အလုပ်အတွေ့ အကြုံမရှိသေးသောအင်ဂျင်နီယာများ အတွက် ဖြစ်သည်။ Electrical, Civil. Mechanical အတွက် 24 Subjects ၊အခြားလိုင်းများအတွက်သင် ရိုးပါအတိုင်းပြီးစီးက Master of Engineering Science ရမည်။ထို့ နောက် Thesis (BAE709A) ပြီးစီးက Master of Engineering ရမည်။

Self study online program ဖြစ်ပြီးပျမ်းမျှတစ်လလျှင်တစ်ဘာသာနှုန်းဖြင့် 20 pages လေ့လာမှု အစီရင်ခံစာကိုဘာသာတိုင်းအတွက်ရေးသားတင်ပြရမည်။

လေ့လာမှုအစီရင်ခံစာတွင်အောက်ပါတို့ ပါဝင်ရမည်။

- နေ့ စွဲ၊လေ့လာသောအခန်းများ၊
- အဓိကအချက်များ၊အခြေခံသဘောတရား၊ဆက်စပ်မှုများ၊ညီမျှခြင်း၊ဖေါ်မြူလာ၊ပုံများ၊
- လက်တွေ့ သုံးခြင်းများ၊
- Powerpoint ပုံစံတင်ပြသောအနှစ်ချုပ်မှတ်စုများ။
- ကိုယ်ပိုင်ထင်မြင်ယူဆသုံးသပ်ချက်များ။

There are 24 units in Masters Program, the candidate will need to complete one unit per month so that the whole program will be completed within 24 months. (120 credits at Masters level and 120 Credits for Bachelors degree total 240 credits) to complete Master of Engineering Science, then submit the thesis to complete Master of Engineering.

Completion of the 12 subjects will earn Graduate Diploma in Engineering Practice (60 credits at Masters level +120 Credits for Bachelors degree level total 180 credits. Completion of two or more units can earn Graduate Certificate in Engineering.

ELECTRICAL

Part 1 Course Work

Any 24 subjects can be selected .

(1) BAE 658-Real-time Systems

(2) BAE 665-Fabrication Engineering at the Micro and Nanoscale

(3) BAE 655-Wireless Communications.

(3A) BAE 671-Satellite Communications and Navigation Systems

(4) BAE 665-Embedded Digital Signal Processing Systems

(5)BAE 657-Advanced Electromagnetics Applications

(6)BAE 676-Failure Analysis

(7)BAE 673-Frequency Stability

(8) MEE11-High Speed A-D Converters

(9) MEE2-Advanced Electric Power Engineering

MEE9-Handbook of Power System Engineering-.pdf (11.57MB)
(10)MEE12-Iterative Learning Control

(11) BAE 664-Distributed Generation in Power System

(12) BAE 675-Nanoelectronics

(13) MEE1-Electric Distribution Systems

(14) BAE 674-Intelligent Systems

(15) MEE13-Non linear control

(16) BAE 656-Advanced Digital Signal Processing and Noise Reduction
(17) BAE 677-Photovoltaic Systems

(18) BAE 660-Control Engineering

(19) BAE 659-Computer-aided Control Systems

(20) MEE7-EMI Filter Design

(21) BAE 661-Design of Electrical Services for Buildings

(22) BAE 670-Power System Engineering

(23) MEE10-High Performance Control of AC Drives

(24) BAE 667-Industrial Control System

(25) MEE14-System Engineering Concepts

(26) MEE6-Electronics+Power Electronics+Opto Electronics+Microwave+Radar

(27) BAE 666-Generating Electricity in a Carbon Constrained World

(28) BAE 669-Power Electronics and Instrumentation Engineering

(29) BAE 663-Advanced Digital Electronics

(30)MEE8-Flexible Power Transmission

(31) BAE 668-Photonics

(32) MEE3-Electric Power Transmission System Engineering

(33) BAE 672-Industrial& System Engineering

(34) MEE5-Electro Optics

(35) MEE4-Electricity Power Generation

(36) BAE 662-Design of Rotating Electrical Machines

Part 2 Thesis

BAE709A Master of Engineering Thesis

CIVIL

Part 1 Course Work

All 24 subjects must be completed.

(1) BAE 654-Theory & Design of Bridges

(2)BAE 653-Surveying

(3) BAE 652-Structural Analysis

(4) BAE 649-Soil & Rock Mechanic

(5)BAE 651-Strom & Waste Water

(6) BAE 650-Steel Design.pdf

(7) BAE 648-Railways Bridges

(8)BAE 646 Highway Engineering

(9) BAE 647-Piling Engineering

(10) BAE 645-Geotechnics

(11) BAE 642-Design of Reinforce Concrete

(12) BAE 644-Estimating

(13) BAE 643-Earthquake Resistant Structure

(14) BAE 638-Construction Drawing

(15)BAE 641-Construction Site Planning

(16) BAE 640-Construction Mathematics.

(17) BAE 639-Construction Materials

(18) BAE 634-Building Construction

(19) BAE 637-Composite Structure of Steel & Concrete

(20) BAE 636-Building Technology Electrical Mechanical System

(21) BAE 635-Building Survey

(22) BAE 633-Bridge Construction

(23) BAE 632-Architectural Design

(24) BAE 631-Advanced Concrete Technology

Part 2 Thesis

BAE709A Master of Engineering Thesis

MECHANICAL

Part 1 Course Work

Any 24 subjects to be completed.

(1) BAE 694-Control Engineering

(2) BAE 682-Assembly Automation & Product Design

(3) BAE 688-Manufacturing & Management.

(4) BAE 692-Metallurgy

(5) BAE 689A-Mechanical Design

(6) BAE 686-Electro-Mechanical Manufacturing Process

(7) BAE 683-Material engineering

(8) BAE 693-Piping System

(9) BAE 689B-Mechanical Design

(10) BAE 625- Structural Engineering Mechanics

(11) BAE 696-Specification Development

(12) BAE 698-Thermal Engineering

(13) BAE 699-Rotating Machinery Vibration

(14) BAE 678A-Machine Design

(15) BAE 684-Computerised Engine Control

(16) BAE 678B-Machine Design

(17) BAE 685-Electric Vehicle Technology

(18) BAE 695-Random Vibration

(19) BAE 691-Mechatronics

(20) BAE 680-Quality Control

(21) BAE 690-Mechanical Estimating

(22) BAE 679- Materials Science

(23) BAE 681- Welding Engineering.

(24) BAE 679-Composite Materials & Joining Technology

(25) BAE 687-Lasers in Manufacturing

(26) BAE 697-Structural Foundation Design

Part 2 Thesis

BAE709A Master of Engineering Thesis

RENEWABLE ENERGY

Part 1 Course Work

The following 10 subjects to be completed.

Each 10 credits and total 100 credits to get Graduate Diploma

(1) RE511- Sustaining Earth Energy resources

(2) RE510- Water Conservation

(3) RE509- Applied Photovoltaics

(4) RE508- Solar Hydrogen Energy System

(5) RE507- Offshore Wind Turbines Part 1

RE507- Offshore Wind Turbines Part 2

(6) RE505- Green Building Design

(7) RE504- Engineering Solution for Sustainability

(8) RE503- Energy Management in Industrial and Commercial Facilities

(9) RE502- Biomass Gasification

(10) RE 501-Control of Solar Energy System

INFORMATION TECHNOLOGY

Part 1 Course Work

The following 8 subjects to be completed
Each 10 credits, total 80 credits to complete Graduate Diploma

(1) Programming (ICT 601)

(2) E-Commerce (ICT 602)

(3) Multimedia Systems (ICT 604)

(4) Database Systems(ICT 502)

(5) Applied Computing I (ICT 505)

(6) Applied Computing (ICT 506)

(7) Software Engineering (ICT 603).zip (90.71MB)

The following two Electrical (Computer) subjects must be completed
Each 5 credits. Two combined units 10 credits

(8) BAE658 Real Time Systems + BAE 674 Intelligent Systems

BAE 658-Real-time Systems

BAE 674-Intelligent Systems

Part 2 Thesis

BAE709B Master of Applied Science (Information Technology) Thesis

ENGLISH VERSION

(1) Master of Engineering Practice (240 credits, 120 credits for BE degree)

Master of Engineering Practice is for experienced engineers . It will include the following subjects of 10 credits each

- BAE 701 Engineering Fundamental
- BAE 702 Engineering Management
- BAE 703 Leadership & Human Resources Management
- BAE 704 Risk Management & Industrial Safety
- BAE 705 Engineering Competency Development
- BAE 706 Engineering Report Writing
- BAE 707 Engineering Ethics
- BAE 708 Engineering Knowledge

Completion of the above subjects will earn Graduate Diploma in Engineering Practice (80 credits at Masters level +120 Credits for Bachelors degree level total 200 credits. Completion of two or more units can earn Graduate Certificate in Engineering.

The candidate will need to do Engineering Design Project of 40 credits to complete Master of Engineering Practice of 240 credits

(2) Master of Engineering (240 credits, 120 credits for BE degree)

Masters of Engineering program is for recent graduates who have completed their BE degrees.

It will include the following 24 subjects of 5 credits each

The students will have to write 20 pages study progress report for each of the subjects outlined below.

The report needs to include

- Date and chapters that the candidate reads (The student will need to read the book
- at least 4 days per week)

- Highlight the key concepts, key formula, key theory & practical application concepts .

- Notes of the topic that you read.

- Key diagrams, formula, problem solutions

- Powerpoint slides to express the key topics

There are 24 units in Masters Program, the candidate will need to complete one unit per month so that the whole program will be completed within 24 months. (120 credits at Masters level and 120 Credits for Bachelors degree total 240 credits) to complete Master of Engineering Science, then submit the thesis to complete Master of Engineering.

Completion of the 12 subjects will earn Graduate Diploma in Engineering Practice (60 credits at Masters level +120 Credits for Bachelors degree level total 180 credits. Completion of two or more units can earn Graduate Certificate in Engineering.

LIST OF SUBJECTS

Please see above