# Bachelor of Science (Maths/Physics/Chemistry) with Vocational Studies

#### **Unicode**

အစဉ်အလာရှိသင်္ချာ၊ ရူပဗေဒ၊ ဓာတုဗေဒဘာသာရပ်များအား BSc (သင်္ချာ / ရူပဗေဒ / ဓာတုဗေဒ) ဘွဲ့ရရှိရန်အတွက်အသက်မွေး ၀ မ်းကျောင်းဘာသာရပ်များတွဲဖက်၍သင်ကြားနိုင်သည်။ ကျောင်းသားများသည်အလယ်အလတ်သိပ္ပံဘာသာရပ်ဒီပလိုမာတွင်ပထမဆုံးသင်ကြားပြီး BSc သင်တန်းကိုဆက်တက်မည်ဖြစ်သည်။

IQY ဒီဂရီကောလိပ်နှင့်တိုက်ရိုက်အွန်လိုင်းပညာသင်ကြားရန်မှာ ၁၀၀၀၀၀ ကျပ်ဖြစ်သည်။ အခြားပညာရေးအဖွဲ့များနှင့်ကျောင်းများသည် IQY ဒီဂရီကောလိပ်နှင့် ပူးပေါင်း၍ အစီအစဉ်ကိုသင်ကြားနိုင်သည်။ ထိုအဖွဲ့များမှအပိုဆောင်းအခကြေးငွေများပေးနိုင်ပါသည်။

Bachelor of Education Course ကိုတက်ရောက်လိုသောကျောင်းသားများအနေဖြင့်လည်း BSc သင်တန်းကိုအပိုထပ်ဆောင်းအခမဲ့ပေးတက်နိုင်ပါသည်။

စုံစမ်းရန်/Enquiry

http://www.igytechnicalcollege.com/contact1.htm

စာရင်းသွင်းရန်/ Enrolment

https://www.emailmeform.com/builder/form/17R43w4uffLma2JArh

Tick BSc Maths/Physics/Chemistry OR BSc(Maths) or BSc(Physics) or BSc(Physics/Chemistry)



#### **English**

Traditional subjects Mathematics, Physics, Chemistry can be studied with Vocational Subjects to get BSc (Maths/Physics/Chemistry) degrees.

The students will firstly study the Diploma in Intermediate Science then will continue BSc course.

The fees for direct online study with IQY Degree College is Kyats 100000.

Other education groups and schools can collaborate with IQY Degree College to teach the program.

Additional fees can be charged by those groups.

The students who want to attend Bachelor of Education Course can also attend BSc course at no extra fees.

# Bachelor of Science (Maths/Physics/Chemistry) with Vocational Studies (49980)

The Bachelor of Science gives students a solid foundation in scientific knowledge and practice while allowing them to specialise in an area of interest.

Students study the Bachelor of Science to broaden their depth of knowledge, before specialising in a specific field.

Studying science provides an education for life. Training in multiple fields of science gives students transferable skills – a foundation of logical, analytical, critical thinking, teamwork and communication.

There are several disciplines studies in Science. At IQY Degree College, they are organized under the title of Work Studies to provide both theory and practical application of vocational studies.

- Bioinformatics------Under Agri Foods
- Genetics------Under Agri Foods
- Molecular and Cell Biology------Under Agri Foods
- Biology------Under Agri Foods
- Biotechnology------Under Renewable Energy
- Food Science------Under Agri Foods
- Geographical Studies----Under Civil Engineering
- Earth Science----Under Civil Engineering
- Immunology------Under Agriculture
- Materials Science---Under Mechanical Engineering
- Microbiology------Under Agri Foods
- Marine and Coastal Science---Under Marine Engineering

### Year 12 Equivalent

# Diploma in Intermediate Science (Dip ISc)

# Year 1 (30 credits)

**BS101-Degree Mathematics (6 credits)** 

BS102 - Degree Chemistry (6 credits)

**BS103** Degree Physics (6 credits)

**BS104** English (6 credits)

### **BS105 Myanmar (6 credits)**

# Year 2 (30 credits)

**BS201 Differential Equations (5 credits)** 

**BS202 Discrete Mathematics (5 credits)** 

**BS203 Materials Chemistry (5 credits)** 

BS204 Engineering Physics 1 (5 credits)

**BS205 English (5 credits)** 

BS206 Myanmar (5 credits)

# Year 3 (30 credits)

**BAE401 Advanced Engineering Mathematics** (5 credits)

**BAE402 Calculus** (5 credits)

**BS301 Physical Chemistry** (5 credits)

**BS302 Mass Transfer** (5 credits)

**BS303 Particle Mechanics** (3 credits)

**BS304 Chemical Process (2 credits)** 

**BS305** Engineering Physics 2 (5 credits)

### Year 4 Vocational Studies (30 credits)

**Choose One Diploma in Work Studies Course** 

(2) အဆင့်မြင့်ဒီပလိုမာအတွက်လေ့လာရန် / To study for Advanced Diploma

Form 220 BWS 1 Sewing & Non Engineering Manufacturing

Form 221 BWS 2 Foods Service

Form 222 BWS 3 Children Service

Form 223 BWS 4 Aged Care

Form 224 BWS 5 Customer Service

Form 225 BWS 6 Safety Industry

Form 226 BWS 7 Transport Logistics

Form 227 BWS 8 Agri Foods Production

Form 228 BWS 9 Live Stock

Form 229 BWS 10 Sales and Marketing

Form 230 BWS 11 Properties Services

Form 231 BWS 12 Performing

Form 232 BWS 13 Water Services

Form 233 BWS 14 Textile Care

Form 234 BWS 15 Personal Services

Form 235 BWS 16 Asset Management

Form 236 BWS 17 Properties Maintenance

Form 237 BWS 18 Industry

Form 238 BWS 19 Clerk of Work

Form 239 BWS 20 Engineering Manufacturing / Printing

Form 240 BWS 21 Public Communication/postal/ Library

Form 241 BWS 22 Education Support

Form 242 BWS 23 Production and Industry

Form 243 Master of Professional Engineering (International)

Form 244 BWS 24 Visual Arts and Crafts

Form 245 BWS 24 Visual Arts and Crafts

# **Bachelor of Science (Physics) with Vocational Studies (49981)**

Physics is the study of the laws of nature that govern the behaviour of the universe, from the smallest sub-atomic particles to the universe itself. It applies these laws to the solution of practical and theoretical problems and to the development of new technologies.

### Year 12 Equivalent

# Diploma in Intermediate Science (Dip ISc)

Year 1 (30 credits)

**BS101-Degree Mathematics (6 credits)** 

**BS102** -Degree Chemistry (6 credits)

**BS103** Degree Physics (6 credits)

**BS104 English (6 credits)** 

BS105 Myanmar (6 credits)

### Year 2 (30 credits)

**BS201 Differential Equations (5 credits)** 

**BS202 Discrete Mathematics (5 credits)** 

**BS203 Materials Chemistry (5 credits)** 

BS204 Engineering Physics 1 (5 credits)

BS205 English (5 credits)

**BS206 Myanmar (5 credits)** 

### Year 3 (30 credits)

BS301 Analog and Digital Electronics 1(5 Credits)

**BS302 Process Control (5 Credits)** 

**BAE407 Electromagnetics (5 Credits)** 

**BAE408 Analog and Digital Electronics 2 (5 Credits)** 

**Vocational Studies (10 Credits)** 

### Year 4 Vocational Studies (30 credits)

**Choose One Diploma in Work Studies Course** 

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Form 225 BWS 6 Safety Industry

Form 226 BWS 7 Transport Logistics

Form 227 BWS 8 Agri Foods Production

Form 228 BWS 9 Live Stock

Form 229 BWS 10 Sales and Marketing

Form 230 BWS 11 Properties Services

Form 231 BWS 12 Performing

Form 232 BWS 13 Water Services

Form 233 BWS 14 Textile Care

Form 234 BWS 15 Personal Services

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### **Bachelor of Science (Mathematics) with Vocational Studies (49982)**

The discipline of mathematics at IQY Degree College is divided into several areas of study: Pure Mathematics, Applied Mathematics and Statistics.

Pure Mathematics is the study of the essential structures of mathematics. Work by pure mathematicians underpins most of the technological advances of this century. Pure Mathematics is concerned with problems and techniques which transcend specific applications. Research, focusing on the development of existing theories or the creation of new ones, may be driven by applications or by the internal demands of the discipline. Pure Mathematics courses provide the insights and understanding required by those using mathematics, leading to mastery of the fundamental processes of mathematical science and the capacity for innovative applications in any area.

Applied Mathematics concerns the development of mathematics and models for understanding scientific phenomena, for the solution of technical and industrial problems, and for use in the social, economic and management sciences. Courses are designed to provide basic mathematical and computational skills needed for a wide range of applications, to develop the capability to construct, analyse and interpret mathematical models, and to encourage enthusiasm for the role of the mathematician in a variety of contexts.

Statistics is the science and art of using factual material for modelling and inference. Its mathematical foundations are in the theory of probability and it deals with how to estimate and make decisions using knowledge which is uncertain or observational material which is subject to error. There is a rich interplay of ideas between the theory of statistics and fields such as engineering, medicine and biological and behavioural sciences where statistical problems constantly arise.

### Year 12 Equivalent

# Diploma in Intermediate Science (Dip ISc)

### Year 1 (30 credits)

**BS101-Degree Mathematics (6 credits)** 

**BS102** -Degree Chemistry (6 credits)

**BS103** Degree Physics (6 credits)

**BS104** English (6 credits)

BS105 Myanmar (6 credits)

### Year 2 (30 credits)

**BS201 Differential Equations (5 credits)** 

**BS202 Discrete Mathematics (5 credits)** 

**BS203 Materials Chemistry (5 credits)** 

BS204 Engineering Physics 1 (5 credits)

**BS205** English (5 credits)

BS206 Myanmar (5 credits)

Year 3 (30 credits)

**BAE401 Advanced Engineering Mathematics** (5 credits)

BAE402 Calculus (5 credits)

**BS301** Programming for Mathematicians and Scientists (5 credits)

**BS302** Applied Mathematics (5 credits)

**Mechanics of Solids** 

**Vocational Subject (10 Credits)** 

### Year 4 Vocational Studies (30 credits)

**Choose One Diploma in Work Studies Course** 

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# **Bachelor of Science (Physics Chemistry) with Vocational Studies (49983)**

This combination discipline degree will provide the following knowledge.

#### **Physics**

Physics is the study of the laws of nature that govern the behaviour of the universe, from the smallest sub-atomic particles to the universe itself. It applies these laws to the solution of practical and theoretical problems and to the development of new technologies.

### Chemistry

The Chemistry stream is designed for students who wish to specialise in the chemical sciences and undertake the maximum number of Chemistry courses. It is designed to provide education and training in all contemporary fields of chemistry, and should be selected by students who wish to devote the majority of their studies at Stage III to Chemistry.

### Year 12 Equivalent

# Diploma in Intermediate Science (Dip ISc)

### Year 1 (30 credits)

**BS101-Degree Mathematics (6 credits)** 

**BS102** -Degree Chemistry (6 credits)

**BS103 Degree Physics (6 credits)** 

**BS104** English (6 credits)

BS105 Myanmar (6 credits)

### Year 2 (30 credits)

**BS201** Differential Equations (5 credits)

**BS202 Discrete Mathematics (5 credits)** 

**BS203 Materials Chemistry (5 credits)** 

BS204 Engineering Physics 1 (5 credits)

BS205 English (5 credits)

BS206 Myanmar (5 credits)

### Year 3 (30 credits)

**BS301 Physical Chemistry** (5 credits)

**BS302 Mass Transfer** (5 credits)

**BS303 Particle Mechanics** (3 credits)

**BS304 Chemical Process (2 credits)** 

### **BS305** Engineering Physics 2 (5 credits)

**Vocational Subject (10 Credits)** 

# Year 4 Vocational Studies (30 credits)

#### **Choose One Diploma in Work Studies Course**

# (2) အဆင့်မြင့်ဒီပလိုမာအတွက်လေ့လာရန် / To study for Advanced Diploma

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