

## 2.2.4 PHYSICAL SCIENCE STREAM

### 2.2.4.1 Engineering (Course Code - 008) (Proposed Intake - 2213)

#### Minimum eligibility requirements for admission :

At least three 'S' grades in Chemistry, Combined Mathematics and Physics at the G.C.E. (Advanced Level) Examination.

#### Fields of specialization available in each university are :

##### *University of Peradeniya:*

- Civil Engineering
- Chemical & Process Engineering
- Computer Engineering
- Electrical & Electronic Engineering
- Mechanical Engineering
- Manufacturing & Industrial Engineering

##### *University of Moratuwa:*

- Biomedical Engineering
- Electrical Engineering
- Chemical & Process Engineering
- Electronic and Telecommunication Engineering
- Civil Engineering
- Mechanical Engineering
- Computer Science & Engineering
- Materials Science & Engineering

##### *University of Ruhuna:*

- Civil and Environmental Engineering
- Electrical and Information Engineering
- Mechanical and Manufacturing Engineering
- Marine Engineering & Naval Architecture

##### *University of Jaffna:*

- Civil Engineering
- Electrical and Electronic Engineering
- Mechanical Engineering
- Computer Engineering

##### *South Eastern University of Sri Lanka:*

- Civil Engineering
- Electrical Engineering #
- Electronic Engineering #
- Mechanical Engineering

# For the time being Electrical Engineering and Electronic Engineering will be combined and offered as 'Electrical & Electronic Engineering'.

**University of Sri Jaywardenepura:**

- Civil Engineering
- Computer Engineering
- Electrical and Electronic Engineering
- Mechanical Engineering

Selection for a particular field of specialization specified above would be done by the University to which the candidate has been admitted.

**2.2.4.2 Engineering (EM) - Earth Resources Engineering  
(Course Code - 009)  
(Proposed Intake - 80)**

**Minimum eligibility requirements for admission :**

At least three 'S' grades in Chemistry, Combined Mathematics and Physics at the G.C.E. (Advanced Level) Examination

- Available University : University of Moratuwa
- Duration : 04 years

**2.2.4.3 Engineering (TM) - Textile & Apparel Engineering  
(Course Code - 010)  
(Proposed Intake - 98)**

**Minimum eligibility requirements for admission :**

At least three 'S' grades in Chemistry, Combined Mathematics and Physics at the G.C.E. (Advanced Level) Examination

- Degree Programme : Bachelor of the Science of Engineering Honours in Textile & Apparel Engineering [BScEngHons (Textile & Apparel Engineering)]
- Available University : University of Moratuwa
- Duration : 04 years

**2.2.4.4 Physical Science  
(Course Code - 013)  
(Proposed Intake - 2327)**

**Minimum eligibility requirements for admission :**

At least 'S' grades in following three subjects at the G.C.E. (Advanced Level) Examination and the three subjects must include;

1. Combined Mathematics or Higher Mathematics  
and
2. Chemistry or Physics

and the third subject from the list given below;

- Agricultural Science
  - Combined Mathematics
  - Biology
  - Higher Mathematics
  - Chemistry
  - Physics
- 
- Degree Programme : B.Sc. in Physical Science
  - Available Universities : University of Colombo  
University of Peradeniya  
University of Sri Jayewardenepura  
University of Kelaniya  
University of Jaffna  
University of Ruhuna  
Eastern University, Sri Lanka  
South Eastern University of Sri Lanka

#### **2.2.4.5 Computer Science (Course Code - 012) (Proposed Intake - 647)**

##### **Minimum eligibility requirements for admission :**

At least a 'C' grade in Combined Mathematics or Physics or Higher Mathematics;  
and

At least 'S' grades in two other subjects listed below at the G.C.E. (Advanced Level) Examination;

- Combined Mathematics
  - Higher Mathematics
  - Mathematics
  - Physics
  - Chemistry
  - Information & Communication Technology
- 
- Degree Programme : B.Sc. in Computer Science
  - Available Universities : University of Colombo School of Computing (UCSC)  
University of Jaffna  
University of Ruhuna  
Trincomalee Campus of the Eastern University, Sri Lanka
  - Duration : 03 years
  - Medium : English

In addition, following Universities/ Institutes offer 04 year Honours degrees:

- B.Sc. (Hons) in Computer Science  
Available Institute : University of Colombo School of Computing (UCSC)
- B.Sc. (Hons) in Software Engineering  
Available Institute : University of Colombo School of Computing (UCSC)

- B.Sc. (Hons) in Computer Science [BScHons (ComputerSc)]  
Available University : University of Kelaniya
- B.Sc. (Hons) in Computer Science [BScHons (Computer Science)]  
Available University : University of Jaffna

**2.2.4.6 Applied Sciences (Physical Science)**  
**(Course Code - 015)**  
**(Proposed Intake - 768)**

**Minimum eligibility requirements for admission :**

At least 'S' grades in following three subjects at the G.C.E. (Advanced Level) Examination and the three subjects must include;

1. Combined Mathematics or Higher Mathematics  
and
2. Chemistry or Physics

and the third subject from the list given below;

- Agricultural Science
- Combined Mathematics
- Biology
- Higher Mathematics
- Chemistry
- Physics
- Information & Communication Technology

**Details of the degree programmes under Applied Sciences (Physical Science) in different universities are given below:**

***Rajarata University of Sri Lanka:***

- B.Sc. in Applied Sciences  
Duration: 03 years
- B.Sc. Honours in Applied Sciences  
Duration: 04 years
- B.Sc. (Joint Major) Degree in Applied Sciences  
Duration: 04 years
- B.Sc. Honours in Industrial Mathematics  
Duration: 04 years

***Sabaragamuwa University of Sri Lanka:***

- B.Sc. (Applied Sciences) Honours Degree in Chemical Technology
- B.Sc. (Applied Sciences) Honours Degree in Computer Science & Technology
- B.Sc. (Applied Sciences) Honours Degree in Applied Physics
- B.Sc. (Applied Sciences) in Physical Sciences

***University of Jaffna (Vavuniya Campus):***

- B.Sc. (Applied Mathematics & Computing)  
Duration: 03 years
- B.Sc. (Computer Science) Honours  
Duration: 04 years

***Eastern University, Sri Lanka (Trincomalee Campus):***

- B.Sc. in Applied Physics and Electronics (General)
- B.Sc. in Applied Physics (Honours)
- B.Sc. in Electronics (Honours)

***Wayamba University of Sri Lanka:***

- B.Sc. (General) Degree (English Medium, 03 years)
- B.Sc. (Joint Major) Degree in Major 1 and Major 2 † (English Medium, 04 years)
- B.Sc. (Honours) Degree in Applied Electronics (English Medium, 04 years)
- B.Sc. (Honours) Degree in Industrial Management (English Medium, 04 years)
- B.Sc. (Honours) Degree in Mathematics with Statistics (English Medium, 04 years)

† Major 1 and Major 2 are two subjects from among the Computing & Information Systems, Electronics, Industrial Management, Mathematics & Mathematical Modeling and Statistics.

**2.2.4.7 Transport & Logistics Management  
(Course Code - 057)  
(Proposed Intake - 91)**

**Minimum eligibility requirements for admission :**

At least three 'S' grades in Chemistry, Combined Mathematics and Physics at the G.C.E. (Advanced Level) Examination.

- Degree Programme : Bachelor of the Science of Engineering Honours in Transport Management & Logistics Engineering [BScEngHons (Transport Management & Logistics Engineering)]
- Available University : University of Moratuwa
- Duration : 04 years

**2.2.4.8 Industrial Statistics & Mathematical Finance**  
**(Course Code - 059)**  
**(Proposed Intake - 121)**

**Minimum eligibility requirements for admission :**

At least 'S' grades in Combined Mathematics and any two subjects given below, at the G.C.E. (Advanced Level) Examination;

- Higher Mathematics
  - Physics
  - Chemistry
- Degree Programmes : B.Sc. (General Degree)  
Duration : 03 years
- B.Sc. (General Degree)  
Duration : 04 years
- B.Sc. Honours (Industrial Statistics)  
Duration : 04 years
- B.Sc. Honours (Mathematical Finance)  
Duration : 04 years
- Available University : University of Colombo

**2.2.4.9 Statistics & Operations Research**  
**(Course Code - 060)**  
**(Proposed Intake - 79)**

**Minimum eligibility requirements for admission :**

At least 'S' grades in Combined Mathematics and two of the following subjects at the G.C.E. (Advanced Level) Examination;

- Biology
  - Chemistry
  - Physics
  - Agricultural Science
  - Mathematics
  - Higher Mathematics
  - Information & Communication Technology
- Degree Programme : Bachelor of Science Honours in Statistics and Operations Research
- Available University : University of Peradeniya
- Duration : 04 years

**2.2.4.10 Computing & Information Systems  
(Course Code - 080)  
(Proposed Intake - 178)**

**Minimum eligibility requirements for admission :**

At least a 'C' grade in Combined Mathematics or Physics or Higher Mathematics and at least 'S' grades for two of the following subjects at the G.C.E. (Advanced Level) Examination;

- Combined Mathematics
- Physics
- Higher Mathematics
- Chemistry
- Information & Communication Technology

In addition to that, at least a 'C' pass in English at the G.C.E. (Ordinary Level) Examination

- Degree Programme : B.Sc. Honours (Computing & Information Systems)
- Available University : Sabaragamuwa University of Sri Lanka
- Duration : 04 years

Candidates are required to submit the duly certified copy of the original G.C.E (Ordinary Level) Examination certificate along with the application for university admission. Failure to submit it will result in rejection of the application for the course of study in Computing & Information Systems.

**2.2.4.11 Physical Science - Information and Communication Technology (Physical Science - ICT)  
(Course Code - 108)  
(Proposed Intake - 156)**

**Minimum eligibility requirements for admission :**

At least 'S' grades in Combined Mathematics, Physics and Information and Communication Technology at the G.C.E. (Advanced Level) Examination.

- Degree Programmes and Universities : B.Sc. in Physics and Electronics  
University of Kelaniya  
  
B.Sc. in Physics and ICT  
[BSc (PICT)]  
University of Sri Jayewardenepura
- Duration : 03 years

**The respective Faculties of the University to which the student has been admitted will do the selection for a particular degree programme within a University.**

**2.2.4.12 Artificial Intelligence**  
**(Course Code - 117)**  
**(Proposed Intake - 50)**

*(New)*

**Minimum eligibility requirements for admission :**

At least a 'C' grade in Combined Mathematics or Physics or Higher Mathematics;  
and

At least 'S' grades in two other subjects listed below at the G.C.E. (Advanced Level) Examination;

- Combined Mathematics
  - Higher Mathematics
  - Mathematics
  - Physics
  - Chemistry
  - Information & Communication Technology
- 
- Degree Programme : Bachelor of Science Honours in Artificial Intelligence [BScHons (AI)]
  - Available Universities : University of Moratuwa
  - Duration : 04 years
  - Medium : English

**2.2.4.13 Electronics and Computer Science**  
**(Course Code - 119)**  
**(Proposed Intake - 80)**

*(New)*

At least a 'C' grade in Combined Mathematics or Physics or Higher Mathematics  
and;

Should have passed the three subjects at the G.C.E.(Advanced Level) Examination including Physics and Combined Mathematics or Higher Mathematics and the third subject from the list given below,

- Chemistry
  - Combined Mathematics
  - Higher Mathematics
  - Information & Communication Technology
- 
- Degree Programmes : Bachelor of Science in Electronics and Computer Science [BSc (Elnc & Comp Sc)]  
Duration : 03 years
  - Bachelor of Science Honours in Electronics and Computer Science [BScHons (Elnc & Comp Sc)]  
Duration : 04 years
  - Available University : University of Kelaniya
  - Medium : English

**Candidates who have offered subjects in the Physical Science Stream at the G.C.E. (Advanced Level) Examination could also seek admission to the following courses of study offered by different universities, provided that they have fulfilled the entry requirements for those courses of study.**

- Quantity Surveying
- Architecture
- Design
- Fashion Design & Product Development
- Law
- Management Studies (TV)
- Surveying Science
- Information Technology (IT)
- Management and Information Technology (MIT)
- Town & Country Planning
- Peace and Conflict Resolution
- Information and Communication Technology (ICT)
- Facilities Management
- Science and Technology
- Computer Science & Technology
- Entrepreneurship and Management
- Physiotherapy
- Tea Technology & Value Addition
- Industrial Information Technology
- Mineral Resources and Technology
- Physical Education
- Sports Science & Management
- Management and Information Technology (SEUSL)
- Speech and Hearing Sciences
- Hospitality, Tourism and Events Management
- Palm and Latex Technology & Value Addition
- Information Technology & Management
- Tourism & Hospitality Management
- Information Systems
- Landscape Architecture
- Translation Studies
- Software Engineering
- Film & Television Studies
- Project Management
- Marine and Fresh Water Sciences
- Food Business Management
- Business Science
- Geographical Information Science
- Financial Mathematics and Industrial Statistics

- Human Resource Development
- Applied Chemistry
- Health Tourism and Hospitality Management
- Yoga and Parapsychology
- Social Studies in Indigenous Knowledge