

## Associate Degree Scheme in Science and Technology (8C112)

### Scheme Intended Learning Outcomes

Upon successful completion of respective programmes of the **Associate Degree Scheme in Science and Technology**, graduates will be able to:

- S-ILO-1      **IT and Quantitative Skills:** Apply information technology and quantitative skills in dealing with problems encountered in daily life, tertiary level studies and general science or engineering settings.
  
- S-ILO-2      **Critical Thinking:** Analyse and evaluate information, ideas, arguments and issues critically, and make decisions that are informed by evidence.
  
- S-ILO-3      **Problem Solving Skills:** Identify new issues and suggest practical solutions in dealing with problems encountered in daily life, tertiary level studies and general science or engineering settings.
  
- S-ILO-4      **Communication:** Communicate in both English and Chinese in professional and academic contexts.
  
- S-ILO-5      **Ethics and Professional Attitude:** Articulate the social and professional responsibility as well as ethics of an associate professional.
  
- S-ILO-6      **Broadening:** Describe issues and problems in a broad range of disciplines beyond their majors, using concepts and tools drawn from different disciplinary perspectives.

In addition to the Scheme Intended Learning Outcomes for the **Associate Degree Scheme in Science and Technology** as a whole, graduates of individual programmes will be able to:

### Associate in Engineering (8C112-ENG)

ENG-P-ILO-1 **Solving Engineering Problems:** Identify, formulate and solve engineering problems.

ENG-P-ILO-2 **Understanding Engineering Constraints:** Identify constraints that may influence engineering problems, systems or projects.

ENG-P-ILO-3 **Engineering Design:** Design engineering components, processes or systems to meet desired needs.

Associate in Information Technology (8C112-IT)

IT-P-ILO-1 **Application of IT Knowledge:** Integrate and apply IT knowledge to solve problems.

IT-P-ILO-2 **Designing and Developing IT Systems:** Design and develop IT systems with systematic approaches.

IT-P-ILO-3 **Recognising IT Opportunities and Constraints:** Identify potential opportunities and constraints that may influence IT issues, systems or projects.

Associate in Statistics and Data Science (8C112-SDS)

SDS-P-ILO-1 **Data Manipulation:** Access and manipulate data in support of data analysis and decision making.

SDS-P-ILO-2 **Data Analysis:** Apply fundamental knowledge of statistical analysis and computer technology to manage and analyse data.

SDS-P-ILO-3 **Decision Making:** Provide useful information to support the decision making from the analytical results.

Associate of Science (8C112-AS)

SCI-P-ILO-1 **Understanding Scientific Methods and Concepts:** Describe and explain fundamental knowledge and techniques of selected science disciplines.

SCI-P-ILO-2 **Solving Science Problems:** Apply appropriate scientific methods and skills to solve problems and complete tasks.

SCI-P-ILO-3 **Science Experiments and Applications:** Formulate hypotheses and conduct scientific experiments for theory testing, and interpret scientific experimental results.