

## Undergraduate Programme Course List

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|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Programme Title:</b>      | Bachelor of Science (Honours) in Artificial Intelligence and Educational Technology and Bachelor of Education (Honours) (Information and Communication Technology and Primary Science) |
| <b>Programme Short Name:</b> | BSc(AIET)&BEd(ICT&PSci)                                                                                                                                                                |
| <b>Programme Code:</b>       | A5B111                                                                                                                                                                                 |
| <b>Year of Entry:</b>        | 2027/28                                                                                                                                                                                |

## Major

| Course Code                                       | Course Title                                              |
|---------------------------------------------------|-----------------------------------------------------------|
| <b>Discipline Studies Major (AI&amp;EdTech)</b>   |                                                           |
| <b>Major Core</b>                                 |                                                           |
| INT1092                                           | Introduction to Educational Technology                    |
| INT2067                                           | Introduction to Programming and Problem Solving           |
| INT2171                                           | Data Structures and Algorithms                            |
| INT4096                                           | Artificial Intelligence and Machine Learning in Education |
| INT4098                                           | Applied Robotics with Applications to Special Education   |
| INT4174                                           | Neural Networks and Deep Learning                         |
| INT4173                                           | Natural Language Processing and Large Language Models     |
| INT3151                                           | Python Programming Lab                                    |
| INT4153                                           | Cyber Security and the Application in Education           |
| <b>Major Elective (Choose 2 out of 7 courses)</b> |                                                           |
| INT4059                                           | Computer-Aided 3D Design and Printing Technologies        |
| INT4074                                           | Mobile Applications Design and Development                |
| INT4154                                           | Technologies in STEAM and AI Education                    |
| INT3068                                           | Computer Organisation and Operating Systems               |
| INT4177                                           | Big Data Analytics                                        |
| INT4178                                           | Robotics and Intelligent Systems                          |
| INT4179                                           | Computer Vision for Education                             |

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|---------------------------------------|------------------------------------------------------------------------------------|
| <b>Internship</b>                     |                                                                                    |
| INT4152                               | Internship                                                                         |
| <b>Education Major (ICT&amp;PSci)</b> |                                                                                    |
| SCI2111                               | Foundation Science: Life & Living                                                  |
| SCI2115                               | Foundation Science: Introduction to Chemistry                                      |
| IIT2059                               | Information Technology supported Learning Environment                              |
| SCI2113                               | Foundation Science: Matter, Energy & Change                                        |
| INT2065                               | Foundations of Information and Communication Technologies                          |
| SCI3116                               | Science, Technology, Engineering & Society                                         |
| SCI2114                               | Foundation Science: The Earth & Beyond                                             |
| IIT3008                               | Database Management Systems                                                        |
| INT3069                               | Internetworking                                                                    |
| INT3117                               | Teaching & Learning of Primary Science                                             |
| INT4175                               | Designing AI-Integrated STEAM Learning                                             |
| <b>Cross-Faculty Core Course</b>      |                                                                                    |
| CFA1001                               | Cross-Faculty Core Course (Component I: Basic Law and National Security Education) |
| CFB3011                               | Cross-Faculty Core Course (Component II: Visits in Greater Bay Area)               |
| CFC1031                               | CFCC-Component III: Exploration of STEAM Education in School Settings              |
| CFC3006                               | CFCC-Component III: Practice of Tai Chi and Healthy Lifestyle Culture in GBA       |
| CFC3012                               | CFCC-Component III: Fundamentals of Big Data and Development of Smart City         |
| CFC3015                               | CFCC-Component III: Urban Heritage Management                                      |

**Education Studies** – *for teacher education programme*

| Course Code                                   | Course Title                                           |
|-----------------------------------------------|--------------------------------------------------------|
| <b>Education Studies – Pedagogy for Major</b> |                                                        |
| INT3090                                       | Curriculum, Pedagogy and Assessment in ICT Education   |
| INT4091                                       | Trends and Development in Learning and Teaching of ICT |