Bachelor of Applied Information Technology

Incorporating: The New Zealand Diploma in Information Technology Technical Support (Level 5) BI1607; and

The New Zealand Certificate in Information Technology (Level 5) BI1606

|  |  |  |  |
| --- | --- | --- | --- |
| Wintec code: | BI1601 | MoE: | WK2687 |
| Level: | 7 | Credits: | 360 |
| Owner: | Centre for Information Technology | Effective Date: | July 2021 |

These regulations should be read in conjunction with the Institute’s Academic Regulations.

1. Admission and Entry
   1. General Academic Admission
      1. Candidates are required to have:
         1. NCEA Level 3 comprised of 60 credits at NCEA Level 3 or above and 20 credits at NCEA Level 2 or above, including:
            1. 14 credits each at NCEA Level 3 in three [approved subjects](http://www.nzqa.govt.nz/qualifications-standards/awards/university-entrance/approved-subjects/)1; and
            2. UE [Literacy](http://www.nzqa.govt.nz/qualifications-standards/awards/university-entrance/literacy-requirements/)2 (10 credits at NCEA Level 2 or above made up of 5 credits each in reading and writing); and
            3. UE [Numeracy](http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/literacy-and-numeracy/level-1-requirements/lit-num-subjects/)3 (10 credits at NCEA Level 1 or above) made up of specified achievement standards or a package of specified unit standards; or
         2. 72 credits at NCEA Level 2 including:
            1. A minimum of 14 credits in each of four subjects; and
            2. UE Literacy (10 credits at NCEA Level 2 or above made up of 5 credits each in reading and writing); and
            3. UE Numeracy (10 credits at NCEA Level 1 or above; or
         3. A relevant qualification at Level 3 on the NZQF or above and the equivalent of UE Literacy and UE Numeracy;

or

* + - 1. The New Zealand Certificate in Information Technology (Level 5); or
      2. The New Zealand Diploma in Information Technology Technical Support (Level 5); or vi) Equivalent.
  1. Special Admission

Domestic applicants aged 20 years or above who have not met the General Admission or entry requirements for a programme but whose skills, education or work experience indicate that they have a reasonable chance of success4 may be eligible for Special Admission. Special admission will be granted at the discretion of the relevant Head of School/Centre Director or designated

1 List of [UE Approved Subjects](http://www.nzqa.govt.nz/qualifications-standards/awards/university-entrance/approved-subjects/) on NZQA website

2 List of Achievement Standards that contribute to [Literacy f](http://www.nzqa.govt.nz/qualifications-standards/awards/university-entrance/literacy-requirements/)rom NZQA website

3 List of Achievement Standards that contribute to [Numeracy f](http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/literacy-and-numeracy/level-1-requirements/lit-num-subjects/)rom NZQA website

4 [Education Act 1989 Section 224 (3)](http://www.legislation.govt.nz/act/public/2011/0066/latest/DLM3612075.html?search=qs_act%40bill%40regulation%40deemedreg_education%2Bact%2B1989_resel_25_h&p=1)

nominee. Such applicants may be required to successfully complete a foundation, bridging or tertiary introductory programme as a condition of entry into higher level programmes.

* 1. Provisional Entry

Domestic applicants aged under 20 years who have not met the general academic admission and entry criteria for a programme but who can demonstrate a reasonable chance of success through other educational attainment and/or work or life experience may be eligible for provisional entry at the discretion of the relevant Head of School/Centre Director or designated nominee. Provisional entry places restrictions on re-enrolment to be lifted if the applicant’s performance is deemed satisfactory by the relevant Head of School/Centre Director or designated nominee.

* 1. English Language Requirements

Candidates who have English as a second language are required to have an International English Language Test System (IELTS) score of 6.0 with no individual band score lower than 5.5; or equivalent.

1. Transfer of Credit
   1. The standard credit limit for TOC is two thirds (⅔) of the qualification.
   2. Transfer of credit will not be granted at Level 7.
   3. In exceptional circumstances, these Transfer of Credit clauses may be waived, with the approval of the Academic Board or delegated authority.
2. Programme Requirements
   1. Every candidate for the Bachelor of Applied Information Technology shall to the satisfaction of the Academic Board follow a programme of study for a period of normally not less than six semesters.
   2. Each candidate’s programme of study shall comprise modules as per their chosen specialisation, totalling 360 credits, from the Schedule of Modules in Section 6 of theseregulations.
   3. All candidates will complete the modules as outlined in the Schedule of Modules table for their chosen specialisation.
3. Completion of the Programme
   1. A full-time candidate will normally complete the Bachelor of Applied Information Technology within five years, unless an extension is granted by special permission of the Centre Director or delegated nominee.
4. Award of the Qualification
   1. Candidates who successfully complete the requirements in clause 3 will receive the award of the Bachelor of Applied Information Technology.
5. Schedule of Modules

*Note: no value in the pre/co-requisite columns means there are no pre/co-requisites for that module.*

# Group A – Compulsory modules for all specialisations

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Module Code | Module Name | Level | Credits | Pre-Requisites | Co-Requisites |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| COMP501 | Information Technology Operations | 5 | 15 |  |  |
| COMP502 | Fundamentals of Programming and Problem Solving | 5 | 15 |  |  |
| INFO501 | Professional Practice | 5 | 15 |  |  |
| INFO502 | Business Systems Analysis and Design | 5 | 15 |  |  |
| COMP503 | Introduction to Networks | 5 | 15 |  |  |
| COMP504 | Operating Systems and Systems Support | 5 | 15 |  |  |
| INFO503 | Database Principles | 5 | 15 |  |  |
| INFO504 | Technical Support | 5 | 15 |  |  |
| COMP601 Object Oriented Programming | | 6 | 15 | COMP502 |  |
| INFO601 Database Modelling and SQL | | 6 | 15 | INFO503 |  |
| MATH601 Mathematics for Information Technology | | 6 | 15 |  |  |
| COMP602 Web Development | | 6 | 15 | COMP502 and INFO502 |  |
| INFO602 Business, Interpersonal Communications and Technical Writing | | 6 | 15 |  |  |
| BIZM701 | Business Essentials for IT Professionals | 7 | 15 | INFO602 |  |
|  | Or |  |  |  |
| INFO701 | Project Management | 7 | 15 | INFO502 |

Group B – Compulsory modules for Network Engineering specialisation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Module Code | Module Name | Level | Credits | Pre-Requisites | Co-Requisites |
| INFO603 Systems Administration | | 6 | 15 |  |  |
| COMP604 Routing and Switching Essentials | | 6 | 15 | COMP503 |  |
| COMP615 Data Centre Infrastructure | | 6 | 15 |  |  |
| COMP701 | Advanced Networking | 7 | 15 | INFO603 |  |
| COMP702 | Scaling Networks | 7 | 15 | COMP503 COMP604 |  |
| COMP704 | Network Security | 7 | 15 | COMP604 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| COMP705 | Connecting Networks | 7 | 15 | COMP702 |  |
| INFO702 | Cyber Security | 7 | 15 | COMP504 or INFO603 |  |
| COMP716 | Virtualisation Essentials | 7 | 15 | COMP504 INFO603 |  |
| COMP714  INFO710 | Network Engineering Project Or  Industry Placement/Internship | 7  7 | 30  30 | COMP701 and COMP702 and COMP704 |  |

# Group C – Compulsory modules for Software Engineering specialisation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Module Code | Module Name | Level | Credits | Pre-Requisites | Co-Requisites |
| COMP605 Data Structures and Algorithms | | 6 | 15 | COMP601 and MATH601 |  |
| MATH602 Mathematics for Programming | | 6 | 15 | MATH601 |  |
| COMP609 Application Development | | 6 | 15 | COMP601 and MATH601 |  |
| INFO703 | Big Data and Analytics | 7 | 15 | COMP605 and MATH601 |  |
| COMP707 | Principles of Software Testing | 7 | 15 | COMP605 |  |
| COMP706 | Game Development | 7 | 15 | COMP601 and COMP605 and MATH602 |  |
| COMP709 | Mobile Applications Development | 7 | 15 | COMP601 and MATH601 |  |
| INFO702 | Cyber Security | 7 | 15 | COMP504 or INFO603 |  |
| COMP715 | Software Engineering Project | 7 | 30 | COMP707 |  |
|  | Or |  |  |
| INFO710 | Industry Placement/Internship | 7 | 30 |

Group D – Compulsory modules for Database Architecture specialisation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Module Code | Module Name | Level | Credits | Pre-Requisites | Co-Requisites |
| COMP605 | Data Structures and Algorithms | 6 | 15 | COMP601 and MATH601 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| COMP606 Web Programming | | 6 | 15 | COMP602 |  |
| INFO604 Database Systems | | 6 | 15 | INFO503 | INFO601 |
| INFO706 | Database Front-End Applications | 7 | 15 | INFO601 and INFO604 |  |
| INFO707 | Cloud Server Databases | 7 | 15 | INFO601 and INFO604 |  |
| INFO703 | Big Data and Analytics | 7 | 15 | COMP605 and MATH601 |  |
| COMP709 | Mobile Applications Development | 7 | 15 | COMP601 and MATH601 |  |
| INFO704 | Data-Warehousing and Business Intelligence | 7 | 15 | INFO601 |  |
| INFO712 | Database Architecture Project | 7 | 30 | INFO707 and |  |
|  |  |  |  | INFO704 and |
|  | Or |  |  | INFO706 |
| INFO710 | Industry Placement/Internship | 7 | 30 |  |

# Group E – Compulsory modules for Multimedia and Web Development specialisation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Module Code | Module Name | Level | Credits | Pre-Requisites | Co-Requisites |
| COMP606 | Web Programming | 6 | 15 | COMP602 |  |
| INFO605 Human Computer Interaction | | 6 | 15 | COMP602 |  |
| COMP616 Front-End Web Development | | 6 | 15 |  |  |
| INFO708 | Data Visualisation | 7 | 15 | COMP606 |  |
| COMP710 | Web Applications Development | 7 | 15 | COMP602 and COMP606 |  |
| INFO702 | Cyber Security | 7 | 15 | COMP504 and COMP601 |  |
| COMP709 | Mobile Applications Development | 7 | 15 | COMP601 and MATH601 |  |
| COMP717 | Advanced Web Technologies | 7 | 15 | COMP606 | COMP710 |
| COMP713 | Web Application Project | 7 | 30 | COMP606 and |  |
|  | Or |  |  | COMP710 |
| INFO710 | Industry Placement/Internship | 7 | 30 |  |

**Group F: Option**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Code** | **Module Name** | **Level** | **Credits** | **Pre-Requisites** | **Co-Requisites** |
| DFNZ701 | Design Factory 1 | 7 | 30 |  |  |

The 30 credit module DFNZ701: Design Factory 1 can be offered as an option within any Wintec degree programme, wherever the degree programme structures allows such an option. Admission into the Design Factory module is on negotiation with the Centre Director or delegated authority and selection into the module is in line with the Design Factory process.

Group G : Transition Modules

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Module Code** | **Module Name** | **Level** | **Credits** | **Pre-Requisites** | | **Co-Requisites** |
| COMP703 | Network Engineering Project | 7 | 15 | INFO603 and COMP702 | | COMP701 |
| COMP708 | Software Engineering Project | 7 | 15 | COMP605 and MATH602 | |  |
| INFO705 | Database Architecture Project | 7 | 15 | INFO601 and INFO604 | |  |
| COMP711 | Web Development Project | 7 | 15 | COMP602 COMP606 | and |  |

These modules are only available under a transition arrangement for applicable students. They may only be taken with the agreement of a Team Manager or the Centre Director.