**Rationale for the Bachelor of ICT Degrees:**



**Bachelor of Technology**

**in**

**Software Technology**

**Multimedia & Web Technology**

**Network Technology**

**Student Handbook**

**Department of ICT**

**Faculty of Training Technology**

**University of Vocational Technology**

**May 2017**

The general and rapid spread of the ICT technology is very apparent in today’s world. Computer technology is present in a very large percentage of appliances; elements of process control equipment and appear on almost every professional’s desk as well as a multitude of smaller computerized devices in handbags or jacket pockets. Electronics, computing and communications are very widespread and have had a profound impact on most industrial sectors. In recent years the spread and dynamic of information and communications technologies (ICT) in Sri Lanka have been steadily increasing. Today the high importance of ICT for the economy and all areas including business, services, domestic and leisure is obvious. ICT developments have changed the society to an ‘information society’ and new possibilities as well as challenges in all areas of work and life have been arisen, in particular in ICT work areas itself.

The new technologies within Information and Communications Technology (ICT) are creating fundamental changes within business and the world economy as a whole and success in this new, and digitally driven, economy. The ICT sector itself faces particular challenges in fulfilling its role in contributing to the success of the national economic success. These include keeping pace with the demands of rapid technological development and the constant innovation in products and services.

The B.Tech in Information & Communication Technology (ICT) Degree is a three-year course of study that combines studies in computer science, software development, information systems, multimedia, web development and computer networks.

Establishment of University of Vocational Technology and the introduction of the degree of bachelor of ICT will be great landmark within the TVET in Sri Lanka. This will provide opportunities for the COT’s (Colleges of Technology), NVQ level 6, past graduates who are serving in the industry as ICT professionals to obtain degree and post degree level qualification from their specialized fields of ICT. At present, the university has provided opportunities for the students who are qualified in G.C.E. Advanced Level to enroll as full-time undergraduates in an appropriate course, chosen according the their G.C.E. Advanced Level stream.

The program has a flexible structure allowing students to choose from a number of specializations: software development, information systems, computer networks, web development and multimedia production. The program includes the study of contract administration, business management and the presentation of information. Over and above this the student will be able to specialize in a field relevant to the industry, which will enhance the capability and value of the B.Tech graduate to the Information and Communication Technology Industry. These degree programs are specially designed for COT’s NVQ Levels 5 and 6 graduates to upgrade their competencies up to degree level.

**Faculty of Training Technology:**

Mr. L.W.S. Kularatne , Senior Lecturer – Grade II, Dean of the Faculty

**Department of ICT**

Ms. TK Malwatta, Senior Lecturer – Grade II, Head of the Department

Mr. P Uruthiran, Lecturer

Ms. SG Nambuwasam, Lecturer

Mr. RMCAB Ratnayake, Lecturer

Mr. HAPI Pathirana, Lecturer

Mr. ASK Wijayawardena, Lecturer

Ms. NWKDVP Opatha, Lecturer

Mr. PHSS Wijayarathna, Senior Engineering Teaching Assistant

**Admission Requirements:**

1. NVQ level 5 or 6, ICT diploma holder from any College of Technology (COT)

**OR**

1. HNDE, NDT, NDES, NDET, NDICT in the field of ICT and acceptable to the Academic Council of UNIVOTEC

**OR**

1. Any other qualification which the Tertiary and Vocational Education Commission have accepted as deemed to be equivalent to NVQ Level 5 or 6.

**OR**

1. G.C.E. Advanced Level Physical Science/ Biological Science with Physics or ICT as a subject / Any other stream with ICT as a subject

Exemptions may be granted in relevant modules after a proper evaluation for those who have NVQ level 6 or equivalent qualifications. Preference will be given to those applications having past diploma industrial experience of at least one year.

**Student Selection:**

**Eligible candidates are required to sit for an aptitude test. Selection is done based on the marks obtain by the candidates.**

**Registration:**

**Registration is the acceptance of the selected applicant as a student in the University. Prior to registration the applicant is issued with an offer letter for a particular academic program along with a voucher to pay the relevant course fee, of which following may be the constituents:**

1. **Registration fee – To be paid at the first registration and subsequently at re-registrations**
2. **Tuition fee**
3. **Facility fee**
4. **Library deposit (Refundable)**
5. **Library fees (nonrefundable)**
6. **Laboratory fee if applicable (nonrefundable)**

**The letter calling for registration will request the applicant to produce the original documents of the following:**

1. **School leaving certificate**
2. **National Identity Card or Passport**
3. **Birth Certificate**
4. **Certificates of all educational qualifications**
5. **Documents requested to be obtained from the employer**
6. **Any other documents depending on the study program**
7. **Documentary evidence for the payment of the Registration fees, course fees, Library fees, etc.**

**University has no obligations to refund the above fees in case of a disqualification of an applicant for reasons due to lapse/s from the part of the applicant at the registration stage. The applicant who is duly registered for an academic program shall become a student of the University and will receive a Student number and a Student Identification Card.**

**The selected candidate shall personally appear before the registration desk for registration, unless the provision is available for online registration.**

**Credit system and the Duration:**

**The course structure is based on module system. Each module has been assigned a credit value, depending upon the number of notional hours required to achieve the outcome of the module. Notional hours include directed learning as well as self-directed learning. One credit is equivalent of 25 notional hours of learning. This system is bench marked with the European Credit Transfer and Accumulation System (ECTS).**

**Duration of the degree program is 3 years. One academic year consists of two semesters. One semester may consist of 15 weeks for full time and 22 weeks for part time programs. Total notional hours per semester, is 750. A total of 25 notional hours is equal to 01 credit. Total number of credits per semester is 30. B.Tech. in ICT degree is a three-year full time course and four-year part time course.**

**Course Structure:**

**Module Code:**

**XX105011 - XX - Department offering the module**

 **1 - Semester**

 **05 - Number of Credits**

 **01 - Serial number of the module**

 **1/0 - 1 - This module has been revised.**

 **0 - This module may be a new module/ This module has not been revised.**

**Module Type:**

**The degree consists of Compulsory (C) modules, Elective (E) modules and Optional (O) modules. Core compulsory modules and Elective modules designated as GPA modules will be used to calculate the grade point averages.**

**C - Compulsory E - Elective**

**O - Optional G - GPA**

**NG - Non GPA**

**B.Tech. in Software Technology:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Module Code** | **Module Title** | **Type** | **Credits** | **Year I** | **Year II** | **Year III** |
| **S-I** | **S-II** | **S-I** | **S-II** | **S-I** | **S-II** |
| IT103011 | Mathematics for ICT I  | C | G | 3 | √ |  |  |  |  |  |
| IT104021 | Computer Programming | C | G | 4 | √ |  |  |  |  |  |
| IT104031 | Software Development Practices | C | G | 4 | √ |  |  |  |  |  |
| IT103041 | Digital Electronics | C | G | 3 | √ |  |  |  |  |  |
| IT103051 | Data Communication and Networks | C | G | 3 | √ |  |  |  |  |  |
| IT103061 | Database Design  | C | G | 3 | √ |  |  |  |  |  |
| IT104071 | Internet Technologies | C | G | 4 | √ |  |  |  |  |  |
| LS103101 | Communication Skills in English I  | C | NG | 3 | √ |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT202011 | Operating Systems  | C | G | 2 |  | √ |  |  |  |  |
| IT203021 | Mathematics for ICT II | C | G | 3 |  | √ |  |  |  |  |
| IT203031 | Computer Architecture  | C | G | 3 |  | √ |  |  |  |  |
| IT204041 | Data Structures and Algorithms | C | G | 4 |  | √ |  |  |  |  |
| IT206051 | Database Systems and Programming | C | G | 6 |  | √ |  |  |  |  |
| IT204061 | Visual Programming I | C | G | 4 |  | √ |  |  |  |  |
| IT206071 | Web Programming  | C | G | 6 |  | √ |  |  |  |  |
| IT203081 | Computer Networks | C | G | 3 |  | √ |  |  |  |  |
| LS203111 | Communication Skills in English II | C | NG | 3 |  | √ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT304011 | Web Technology and Applications | C | G | 4 |  |  | √ |  |  |  |
| IT304021 | Platform Independent Programming  | C | G | 4 |  |  | √ |  |  |  |
| IT306031 | Visual Programming II | C | G | 6 |  |  | √ |  |  |  |
| IT306041 | Software Architectures and Design | C | G | 6 |  |  | √ |  |  |  |
| IT304051 | Software Deployment and Evolution | C | G | 4 |  |  | √ |  |  |  |
| IT304061 | Database Implementation | C | G | 4 |  |  | √ |  |  |  |
| MS304121 | Entrepreneurship Development and Management | C | G | 4 |  |  | √ |  |  |  |
| IT302160 | Psychology | E | NG | 2 |  |  | √ |  |  |  |
| IT302170 | Soft Skills and Personal development | E | NG | 2 |  |  | √ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT404010 | Mobile Application Development | C | G | 4 |  |  |  | √ |  |  |
| IT404020 | Cloud Based Application Development  | C | G | 4 |  |  |  | √ |  |  |
| IT402030 | Human Computer Interaction  | C | G | 2 |  |  |  | √ |  |  |
| IT404041 | Real-Time Programming | C | G | 4 |  |  |  | √ |  |  |
| IT406051 | Software Testing and Reliability | C | G | 6 |  |  |  | √ |  |  |
| IT403061 | Enterprise System Technologies and Architectures | C | G | 3 |  |  |  | √ |  |  |
| IT402070 | UX Engineering | E | G | 2 |  |  |  | √ |  |  |
| MS403130 | Research Methodology  | C | G | 3 |  |  |  | √ |  |  |
| IT402170 | Meditation & Stress Management | E | NG | 2 |  |  |  | √ |  |  |
| EE402911 | Energy Management in IT Environment | E | NG | 2 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT514011 | Work Based / Industrial Training | C | G | 14 |  |  |  |  | √ |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT604011 | Professional Issues in Information Technology | C | G | 4 |  |  |  |  |  | √ |
| IT604021 | Enterprise System Design | C | G | 4 |  |  |  |  |  | √ |
| IT604030 | Enterprise Resource Planning Systems | C | G | 4 |  |  |  |  |  | √ |
| IT604040 | Intelligent Systems  | C | G | 4 |  |  |  |  |  | √ |
| IT604051 | Information Systems Security and Practices | C | G | 4 |  |  |  |  |  | √ |
| IT604061 | Software Project Management | C | G | 4 |  |  |  |  |  | √ |
| IT604071 | Enterprise Application Development | C | G | 4 |  |  |  |  |  | √ |
| IT602080 | Photography | E | NG | 2 |  |  |  |  |  | √ |
| MS602910 | Occupational Health and Safety | E | NG | 2 |  |  |  |  |  | √ |
| IT604090 | Game Development and Programming | E | G | 4 |  |  |  |  |  | √ |
| IT603100 | Digital Marketing | E | G | 3 |  |  |  |  |  | √ |
| IT612111 | Final Year Project (Software Development Project) | C | G | 12 |  |  |  |  |  | √ |

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Credit Value** | **Credit Value** | **Credit Value** |
| **(GPA)** | **(NGPA)** | **(E/GPA)** |
| Total number of credits of the degree program | 167 | 18 | 9 |
| Minimum number of credits required for graduation | 167 | 8 | 5 |
| Maximum number of credits can be obtained | 167 | 14 | \* |

**B.Tech. in Multimedia & Web Technology**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Module Code** | **Module Title** | **Type** | **Credits** | **Year I** | **Year II** | **Year III** |
| **S-I** | **S-II** | **S-I** | **S-II** | **S-I** | **S-II** |
| IT103011 | Mathematics for ICT I  | C | G | 3 | √ |  |  |  |  |  |
| IT104021 | Computer Programming | C | G | 4 | √ |  |  |  |  |  |
| IT104031 | Software Development Practices | C | G | 4 | √ |  |  |  |  |  |
| IT103041 | Digital Electronics | C | G | 3 | √ |  |  |  |  |  |
| IT103051 | Data Communication and Networks | C | G | 3 | √ |  |  |  |  |  |
| IT103061 | Database Design  | C | G | 3 | √ |  |  |  |  |  |
| IT104071 | Internet Technologies | C | G |  4 | √ |  |  |  |  |  |
| LS103101 | Communication Skills in English I  | C | NG |  3  | √ |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT202011 | Operating Systems  | C | G | 2 |  | √ |  |  |  |  |
| IT203021 | Mathematics for ICT II | C | G | 3 |  | √ |  |  |  |  |
| IT203031 | Computer Architecture  | C | G | 3 |  | √ |  |  |  |  |
| IT204041 | Data Structures and Algorithms | C | G | 4 |  | √ |  |  |  |  |
| IT206051 | Database Systems and Programming | C | G | 6 |  | √ |  |  |  |  |
| IT204061 | Visual Programming I | C | G | 4 |  | √ |  |  |  |  |
| IT206071 | Web Programming  | C | G | 6 |  | √ |  |  |  |  |
| IT203081 | Computer Networks | C | G | 3 |  | √ |  |  |  |  |
| LS203111 | Communication Skills in English II  | C | NG | 3 |  | √ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT304011 | Web Technology and Applications | C | G | 4 |  |  | √ |  |  |  |
| IT304021 | Platform Independent Programming  | C | G | 4 |  |  | √ |  |  |  |
| IT304071 | Fundamentals of Mass Communication and Media Design | C | G | 4 |  |  | √ |  |  |  |
| IT303081 | Art and Design  | C | G | 3 |  |  | √ |  |  |  |
| IT306091 | 2D and 3D Graphics  | C | G | 6 |  |  | √ |  |  |  |
| IT304101 | Video Production Techniques | C | G | 4 |  |  | √ |  |  |  |
| IT304111 | Animation Technology and Applications  | C | G | 4 |  |  | √ |  |  |  |
| MS304121 | Entrepreneurship Development and Management | C | G | 4 |  |  | √ |  |  |  |
| IT302160 | Psychology | E | NG |  2 |  |  | √ |  |  |  |
| IT302170 | Soft Skills and Personal development | E | NG |  2  |  |  | √ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT404010 | Mobile Application Development | C | G | 4 |  |  |  | √ |  |  |
| IT404020 | Cloud based Application Development | C | G | 4 |  |  |  | √ |  |  |
| IT402030 | Human Computer Interaction  | C | G | 2 |  |  |  | √ |  |  |
| IT406081 | Digital Signal Processing Techniques and Image Processing | C | G | 6 |  |  |  | √ |  |  |
| IT402090 | Audio Editing and Music Production  | C | G | 2 |  |  |  | √ |  |  |
| IT404101 | Audio and Video Postproduction Techniques | C | G | 4 |  |  |  | √ |  |  |
| IT406111 | Multimedia Product Development | C | G | 6 |  |  |  | √ |  |  |
| MS403130 | Research Methodology | C | G | 3 |  |  |  | √ |  |  |
| IT402170 | Meditation & Stress Management | E | NG | 2 |  |  |  | √ |  |  |
| EE402911 | Energy Management in IT Environment | E | NG | 2 |  |  |  | √ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT514011 | Work Based / Industrial Training | C | G | 14 |  |  |  |  | √ |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT604011 | Professional Issues in Information Technology | C | G | 4 |  |  |  |  |  | √ |
| IT604021 | Enterprise System Design | C | G | 4 |  |  |  |  |  | √ |
| IT604121 | Multimedia Project Management | C | G | 4 |  |  |  |  |  | √ |
| IT603130 | Content Management Systems and Frameworks | C | G | 3 |  |  |  |  |  | √ |
| IT604141 | Multimedia Data Processing  | C | G | 4 |  |  |  |  |  | √ |
| IT603100 | Digital Marketing | C | G | 3 |  |  |  |  |  | √ |
| IT602080 | Photography | E | NG | 2 |  |  |  |  |  | √ |
| MS602910 | Occupational Health and Safety | E | NG | 2 |  |  |  |  |  | √ |
| IT604090 | Game Development and Programming | E | G | 4 |  |  |  |  |  | √ |
| IT604040 | Intelligent Systems  | E | G | 4 |  |  |  |  |  | √ |
| IT612111 | Final Year Project (Multimedia and Web Development Project) | C | G | 12 |  |  |  |  |  | √ |

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Credit Value** | **Credit Value** | **Credit Value** |
| **(GPA)** | **(NGPA)** | **(E/GPA)** |
| Total number of credits of the degree program | 167 | 18 | 8 |
| Minimum number of credits required for graduation | 167 | 8 | 5 |
| Maximum number of credits can be obtained | 167 | 14 | \* |

**B.Tech. in Network Technology**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Module Code** | **Module Title** | **Type** | **Credits** | **Year I** | **Year II** | **Year III** |
| **S-I** | **S-II** | **S-I** | **S-II** | **S-I** | **S-II** |
| IT103011 | Mathematics for ICT I  | C | G | 3 | √ |  |  |  |  |  |
| IT104021 | Computer Programming | C | G | 4 | √ |  |  |  |  |  |
| IT104031 | Software Development Practices | C | G | 4 | √ |  |  |  |  |  |
| IT103041 | Digital Electronics | C | G | 3 | √ |  |  |  |  |  |
| IT103051 | Data Communication and Networks | C | G | 3 | √ |  |  |  |  |  |
| IT103061 | Database Design  | C | G | 3 | √ |  |  |  |  |  |
| IT104071 | Internet Technologies | C | G | 4 | √ |  |  |  |  |  |
| LS103101 | Communication Skills in English I  | C | NG |  3  | √ |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT202011 | Operating Systems  | C | G | 2 |  | √ |  |  |  |  |
| IT203021 | Mathematics for ICT II | C | G | 3 |  | √ |  |  |  |  |
| IT203031 | Computer Architecture  | C | G | 3 |  | √ |  |  |  |  |
| IT204041 | Data Structures and Algorithms | C | G | 4 |  | √ |  |  |  |  |
| IT206051 | Database Systems and Programming | C | G | 6 |  | √ |  |  |  |  |
| IT204061 | Visual Programming I | C | G | 4 |  | √ |  |  |  |  |
| IT206071 | Web Programming  | C | G | 6 |  | √ |  |  |  |  |
| IT203081 | Computer Networks | C | G | 3 |  | √ |  |  |  |  |
| LS203111 | Communication Skills in English II  | C | NG |  3 |  | √ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT304011 | Web Technology and Applications | C | G | 4 |  |  | √ |  |  |  |
| IT304021 | Platform Independent Programming  | C | G | 4 |  |  | √ |  |  |  |
| IT304121 | Network Administration | C | G | 4 |  |  | √ |  |  |  |
| IT306131 | Internetwork Switching | C | G | 6 |  |  | √ |  |  |  |
| IT306141 | System Administration | C | G | 6 |  |  | √ |  |  |  |
| IT304151 | Wireless Communication | C | G | 4 |  |  | √ |  |  |  |
| MS304121 | Entrepreneurship Development and Management | C | G | 4 |  |  | √ |  |  |  |
| IT302160 | Psychology | E | NG |  2 |  |  | √ |  |  |  |
| IT302170 | Soft Skills and Personal development | E | NG |  2 |  |  | √ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT404010 | Mobile Application Development | C | G | 4 |  |  |  | √ |  |  |
| IT404020 | Cloud Based Application Development | C | G | 4 |  |  |  | √ |  |  |
| IT404121 | Internetwork Routing | C | G | 4 |  |  |  | √ |  |  |
| IT406131 | Windows Server Administration | C | G | 6 |  |  |  | √ |  |  |
| IT406141 | Network Systems Implementation  | C | G | 6 |  |  |  | √ |  |  |
| IT404150 | Network Programming | C | G | 4 |  |  |  | √ |  |  |
| IT403160 | IoT Device Programming | C | G | 3 |  |  |  | √ |  |  |
| MS403130 | Research Methodology | C | G | 3 |  |  |  | √ |  |  |
| IT402170 | Meditation & Stress Management | E | NG |  2 |  |  |  | √ |  |  |
| EE402911 | Energy Management in IT Environment | E | NG |  2 |  |  |  | √ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT514011 | Work Based / Industrial Training | C | G | 14 |  |  |  |  | √ |  |
|  |  |  |  |  |  |  |  |  |  |  |
| IT604011 | Professional Issues in Information Technology | C | G | 4 |  |  |  |  |  | √ |
| IT604051 | Information Systems Security and Practices | C | G | 4 |  |  |  |  |  | √ |
| IT604151 | Network Project Management | C | G | 4 |  |  |  |  |  | √ |
| IT604161 | Broadband Networks | C | G | 4 |  |  |  |  |  | √ |
| IT604171 | Photonics and Fiber Optics  | C | G | 4 |  |  |  |  |  | √ |
| IT603100 | Digital Marketing | E | G | 3 |  |  |  |  |  | √ |
| IT604030 | Enterprise Resource Planning Systems | E | G | 4 |  |  |  |  |  | √ |
| IT604040 | Intelligent Systems  | E | G | 4 |  |  |  |  |  | √ |
| IT602080 | Photography | E | NG | 2 |  |  |  |  |  | √ |
| MS602910 | Occupational Health and Safety | E | NG | 2 |  |  |  |  |  | √ |
| IT612111 | Final Year Project (Network Development Project) | C | G | 12 |  |  |  |  |  | √ |

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Credit Value** | **Credit Value** | **Credit Value** |
| **(GPA)** | **(NGPA)** | **(E/GPA)** |
| Total number of credits of the degree program | 167 | 18 | 11 |
| Minimum number of credits required for graduation | 167 | 8 | 5 |
| Maximum number of credits can be obtained | 167 | 14 | \* |

**Work Based/Industrial Training:**

**Fifth semester of the study program is dedicated to this component of the degree. Propose of this module is to enable students to apply competencies required through the academic program to workplace experiences.**

**Students studying the degree in full time mode will be placed in various industrial establishments/worksites related to their fields of studying for a period of six months through National Apprentice and Industrial Training Authority (NAITA) under undergraduate in plant training scheme.**

**Those who are studying in the part time mode are required to undertake work based training in their places of work, under supervise of a senior officer. Work undertaken during this period should be different from the part time work which he/she is suppose to the in his/her job.**

**Final Year Project:**

**This module is given in the sixth semester. This is a group project, which provides opportunity for the students to enhance their ability in problem solving, team working and leadership using the competencies acquired throughout the undergraduate career through the implementation of a group project.**

**To successfully complete this module, students are expected to design and implement a challenging ICT related project applying knowledge and skills within a given timeframe and present technical ideas in written and oral form effectively.**

**Course Assessment System:**

**The performance of each student in each module will be evaluated by continuous assessments and a semester-end examination.**

**The weightings assigned for the continuous assessment component and the semester - end examination of a module will be as follows.**

* **Continuous Assessment 40% - 30%**
* **Semester - End Examination 60% 70%**

**The continuous assessment may consist of assignments, quizzes, laboratory work, practical, tutorials, demonstrations, presentations, projects, oral tests and mid semester tests. Weightings of each of these components used in the determination of the final grade for each module should be clearly conveyed in writing to the students at the commencement of each module along with the outline of the module.**

**The fulltime and part-time students should maintain 80% and 60% of attendance respectively and satisfy the requirements specified in each module descriptor to be eligible to sit for the semester-end examination.**

**All Candidates should obtain at least 30% of the marks allocated for continuous assessment to get qualified to sit for the semester - end examination.**

**Grading System and Computation of Grade Point Average (GPA):**

**A letter grade shall be awarded to each module. The cut-off marks for each grade and the corresponding grade points are given below.**

|  |  |  |
| --- | --- | --- |
| **Grades** | **Marks**  |  **Grade Points** |
| A+ | 90-100 | 4.00 |
| A | 80 – 89 | 3.70 |
| B+ | 70 – 79 | 3.30 |
| B | 60 – 69 | 3.00 |
| C+ | 50 – 59 | 2.70 |
| C | 40 – 49 | 2.00 |
| D | 30 – 39 | 1.00 |
| E | 01 – 29 | 0.00 |
| F | 0 | 0.00 |

1. **Grade D or above is required to earn credits for a module.**
2. **A minimum 30% should be obtained from continuous assessment for eligibility to sit for the end semester exam. A minimum requirement of 30% should be obtained from the semester - end Examination in order to obtain a grade D or above for a module.**
3. **A student satisfying continuous assessment requirements and getting between 1 – 29 marks for the semester end examination receives a symbol as E(ET) while a student getting 0 for the semester end examination receives symbol F(ET).**
4. **A student satisfying semester end examination requirements and getting between 1 and 29 marks for the continuous assessment receives a symbol as E(CA) a student getting 0 for the continuous assessment receives symbol as F(ET). A student getting between 1 and 29 marks for both the semester end examination & the continuous assessment receives the Grade E while a student getting 0 for both the semester end examination & continuous assessment receives the Grade F.**
5. **A student must repeat the part of the module examination/complete module examination having Grade E or F & must improve up to Grade D or C. The modules having Grade D are allowed to repeat only when the Semester Grade Point Average (SGPA) of a particular semester is less than 2.00. By repeating only the semester end examination/continuous assessment or both, the Grades F, E or D can be improved only up to a C grade and considered for calculating Grade Point Average (GPA).Repeating continuous assessment or semester end examination is considered as repeating the whole module.**

**Academic Concession:**

**Academic Concession may be granted to a student with the approval of the Faculty Board, in the event that a student is unable to sit for the semester-end examination due to illness or other compelling reason. In such instances the student must notify the Dean of the faculty within 48 hours of the cause. Further, the student should make an appeal with supporting documents to the Dean for an Academic Concession within one week from the date of the examination. The continuous assessment component can be carried forward to the next examination as the first attempt.**

**Semester Grade Point Average (SGPA):**

**The calculation of the Semester Grade Point Average will be based on the Grade Points earned for all modules registered in a semester (except those awarded with academic concession) weighted according to number of credits. The SGPA is rounded to the nearest second decimal place. The SGPA is reported on transcripts and Statement of Results that may be issued for each semester.**

**The formula for calculating SGPA is given below.**

Semester GPA (SGPA) = Σ (Number of Credits for a semester module x

Grade point obtained for the module)

 Total number of credits for the Semester

**Final Grade Point Average (FGPA):**

**The Final Grade Point Average is the absolute academic standing of the student calculated on the basis of SGPA. The FGPA will be calculated using the following formula.**

 **Σ (Semester GPA)**

**Final GPA (FGPA) =**

 **Number of Semesters**

**Unsatisfactory Standing on Academic Performance:**

**If the student’s SGPA falls between 1.50 and 1.99 the student will be placed on Academic Warning.**

**A student who falls into one of the following categories of the SGPA will not be permitted to register for a new module until the SGPA is upgraded to 2.00 or more.**

1. **SGPA < 1.50 in any two semesters**
2. **SGPA < 1.50 in any semester and 1.50**  **SGPA < 2.00 in any two semesters**
3. **1.50****SGPA < 2.00 in any three semesters**

**Graduation Requirements:**

**Credit Requirements:**

**A student should satisfy the following requirements in order to be admitted to the Bachelor of Technology in Software Technology/Multimedia & Web Technology/Network Technology.**

1. **A minimum total of 180 credits from modules specified.**
2. **A minimum Final Grade Point Average (FGPA) of 2.00**
3. **Any other mandatory requirement specified by the Academic Council**

**Key to Final Results (FGPA – Final Grade Point Average):**

**FGPA Final Results**

**3.7 or Above First Class**

**3.30 – 3.69 Second Upper**

**2.70 – 3.29 Second Lower**

**2.00 – 2.69 Ordinary Pass**

**Below 2.00 Incomplete**