BIT

STUDENT HANDBOOK 2022
BACHELOR OF INFORMATION TECHNOLOGY
(External Degree Programme)

University of Colombo

UCSC

University of Colombo
School of Computing

BIT Handbook 2022

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BIT

BACHELOR OF INFORMATION TECHNOLOGY (BIT)
External Degree

STUDENT HANDBOOK
ACADEMIC YEAR - 2022

Conducted by

UCSC

University of Colombo School of Computing

Disclaimer

This handbook is compiled with information received up to July 2022, and is applicable to the students of all Levels of Academic Year 2022.

It is hereby informed that this handbook is only for general information and is not for official purposes.

Any information contained herein should be confirmed by reference to the relevant authority.

For the latest version of the handbook please visit our website

http://bit.ucsc.cmb.ac.lk
http://www.bit.lk

Vision

Be a global leader in computing, advancing the frontiers of new knowledge through learning and research.

Mission

To advance and enhance computing knowledge, fostering global strategic alliances, promoting crossdisciplinary research, producing socially responsible professionals with entrepreneurial skills, leadership qualities and integrity contributing to position the country as a knowledge hub in the region.

ACRONYMS

ADMTC	:	Advanced Digital Media Technology Centre
A/L	:	Advanced Level
BIT	:	Bachelor of Information Technology
CSC	:	Computing Services Centre
DIT	:	Diploma in Information Technology
EDC	:	External Degrees Centre
eLC	:	e-Learning Centre
FIT	:	Foundation in Information Technology
G.C.E.	:	General Certificate in Education
GPA	:	Grade Point Average
GPV	:	Grade Point Value
HDIT	:	Higher Diploma in Information Technology
ICT	:	Information and Communication Technologies
IT	:	Information Technology
LMS	:	Learning Management System
MPhil	:	Master of Philosophy
MSc	:	Master of Science
O/L	:	Ordinary Level
PDC	:	Professional Development Centre
PhD	:	Doctor of Philosophy
R&D	:	Research and Development
UCSC	:	University of Colombo School of Computing
UGC	:	University Grants Commission
VLE	:	Virtual Learning Environment

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Message from the Vice Chancellor

I extend my heartfelt congratulations to each one of you on being admitted as an external student for the Bachelor of Information Technology (BIT) degree programme conducted by the University of Colombo School of Computing (UCSC). The University of Colombo has a history dating back to over 150 years and is the most prestigious university to read a degree programme in Sri Lanka. Although many students want to register as an internal student, it is not possible to provide such opportunities due to the limitation of resources and other regulatory issues. In such circumstances, the external degree programmes in the University of Colombo provide open distance learning opportunities for registered students to obtain their graduate or diploma level qualifications.

The UCSC which is a proud feather on the hat of the University of Colombo, and has been given the responsibility of managing the BIT degree programme since 2000. It is noteworthy that the commencement of this specific programme was by the Institute of Computer Technology (ICT), the predecessor of the UCSC. The ICT took the initiative to launch the external degree in Information Technology (BIT) with the anticipation of developing the human capital in information and communication technologies to meet the national demand of professionals in the

country. The BIT provides a well-defined syllabus that is well-aligned with international standards. Its syllabus is reviewed and updated regularly to meet the changing requirements of the industry. You will be happy to note that this degree programme enables you to secure a wide range of job opportunities and has been redesigned according to the policy on Sri Lanka Qualification Framework (SLQF) introduced by University Grants Commission (UGC).

In 2002, the UCSC was established by merging the Institute of Computer Technology (ICT) and the Department of Computer Science (DCS) of the Faculty of Science in order to expand the capacity of the University of Colombo to contribute to the development of computing education and research. After 20 years, the UCSC has become the strongest learning facility for computing education, with more than 35 academic staff who hold postgraduate qualifications. All staff of UCSC are actively engaged in and contribute to the development of the BIT programme, which has become the most popular local external degree programme in Information Technology.

Hence, it is a great opportunity in your career to become a student of this external degree programme. The student handbook is a useful document for you both regarding the degree programme and the operational mechanisms of the academic and administrative spheres. As students of the University of Colombo, I hope that you will derive the maximum benefits from the treasure trove of opportunities that will be bestowed upon you and work with the commitment to become responsible citizens.

I wish you every success and a bright future in all your endeavors.

Senior Professor (Chair) H.D. Karunaratne
Vice Chancellor, University of Colombo

Message from the Director

On behalf of the University of Colombo School of Computing (UCSC) administration, it is a privilege for me to extend a warm welcome to all incoming students to the Bachelor of Information Technology (BIT) degree program for the academic year 2022.

In addition, I would like to congratulate all of you for being selected for admission to Sri Lanka's top university for computing studies. The University of Colombo began offering BIT program in 2000, and the UCSC has been in charge of overseeing the BIT degree's administration as one of its main responsibilities since 2002.

A new era of higher education has begun under your leadership, and it will be distinct from your previous schooling period. The university will facilitate your study in terms of higher education and you will have more responsibility to manage your education and reach the highest level possible with your commitment and dedication. To achieve this, UCSC is committed to a student-centered education that fosters academic success through a clearly defined and gradually revised syllabus in accordance with IEEE/ACM guidelines. E-learning was included to the BIT degree program in 2003, along with the suggested texts and other study guides. The Learning Management System (LMS) or Virtual

Learning Environment (VLE) offers an online portal to access BIT degree learning courses with self-evaluating quizzes, learning materials, and related activities. Additionally, we have a highly competent academic staff that will use every available tool to support the development and administration of the BIT program and guarantee that the students achieve their highest academic potentials.

Another important aspect that you must keep in mind is the value of English and Mathematics for successfully finishing the degree. The BIT program is entirely taught in English, so there might be some challenges along the road. One must therefore use extra effort to conquer these challenges, but when done successfully, you will be able to enjoy yourself.

I thus expect that all of the incoming BIT undergraduates will work hard and develop into eminent figures with cutting-edge knowledge who become well-known both locally and globally. Once more, I would want to wish you luck on your upcoming new voyage.

Dr. Ajantha Atukorale
Director, University of Colombo School of Computing

AN APPRECIATION OF THE FOUNDER DIRECTOR OF THE UCSC

Vidya Jyothi Professor V. K. Samaranayake (1939 – 2007)

Vanniarachchige Kithsiri Samaranayake was born on the 22nd of May 1939 and had his early education in Hewavitharana Vidyalaya, Rajagiriya, where his father was the principal and his mother was a teacher. He entered Ananda College in 1948 and then Royal College through a competitive examination in 1950.

Prof. V.K.Samaranayake entered the University of Ceylon to read for a degree in Science in 1956 having completed his secondary education at Ananda and Royal Colleges. He was selected to do a Special degree in Mathematics and obtained a First Class Honours degree in 1961.

Prof. Samaranayake entered the Imperial College, London in 1963 on a state scholarship for his postgraduate studies and then moved on to University College, London to complete his PhD in record time before returning home in 1966. At the age of just 35, in recognition of his great scholarship, the University of Colombo appointed him to its highest Academic position of Professor of Mathematics in 1974. He was subsequently appointed Senior Professor of Mathematics in 1984, invited to be the first Senior Professor of the newly created Chair in Computer Science in 1996 and appointed Emeritus Professor of the University of Colombo after his retirement in 2004. In recognition of which the University honoured him with the title Professor Emeritus of

Computer Science, and conferred on him the Degree of Doctor of Science, Honoris Causa at its subsequent Convocation.

As it is not possible to confine the appreciation of his enormous service to the nation and his illustrious career as an academic and an administrator to a few pages, some of the significant milestones of his illustrious career are outlined below.

- 1987 - 1999 he held the position of the Chairman of the Computer and Information Technology Council of Sri Lanka (CINTEC). During this period he was also tasked with chairing the Presidential Task Force on Integrated R & D in Science & Technology 1997-2000 and the National Y2K Task Force in Sri Lanka 1998-2000.
- 1992 - He initiated the participation of Sri Lankan school children in Computer Programming, by committing CINTEC funds for sending teams of 4 to the International Olympiad in Informatics (IOI).
- In 1995 he was instrumental in setting up intensive discussions with Sri Lanka Telecom, to commence Internet services in Sri Lanka. These discussions eventually brought LEARN and Internet connectivity to Sri Lanka in 1996.
- He was instrumental in forming the IT for Computer Training Organizations (ACTOS), for the Software Industry (SLASI), and for the Computer Vendors (SLCVA). He also created the umbrella organization for these associations in the form of the Federation of IT Industry Associations (FITIA).
- In 1984 he was successful in building up Academic Faculty in Computer Science at the University of Colombo. Starting with the Statistical Unit, the Statistical Computing and Data Processing Centre within the Mathematics Department, Prof. Samaranayake first convinced the University to set up a Department of Statistics and Computer Science in 1985, the first of its kind in Sri Lanka, and then went onto create the first School in the university system in the form of the University of Colombo School of Computing (UCSC) in 2002.

- Commencing in the year 2000, Prof. Samaranayake initiated another major milestone in ICT HRD in Sri Lanka with the launch of the innovative Bachelor of Information Technology (BIT) External Degree programme. Apart from the prestige of a University of Colombo degree to students, the BIT programme also has the indirect but most desirable effect of standardizing ICT education of an era where commercialism is threatening the quality of education.

- His quest for capacity building in ICT human resources can be seen more clearly by his single-handed contribution in this area at the University of Colombo – making it the showcase among the entire university system in Sri Lanka and beyond. Investing in human resource development in ICT is also a huge risk – that of aiding in the brain drain. This is where Prof. Samaranayake's broadness of vision and almost unreasonable trust, especially in the case of training Faculty of the University, is most clearly seen. Commencing with the meagre funding resources extended by donors in 1970s an era when the developed countries themselves were just getting into the area of serious ICT human resource development, Prof. Samaranayake commenced his quest of directing all local and foreign funding to develop ICT Human Resource development at the University of Colombo.

- In recognition of his towering contribution in the field of ICT in the country, he has been bestowed with several national awards in the form of the Lions' Club Gold Medal for the Most Outstanding Citizen of Sri Lanka in 1986, the Vishva Prasadini Award in 1996 on the occasion of the 80th birthday of the then Prime Minister Sirimavo Bandaranaike and the Vidya Jyothi Presidential Award in 1998.

- Prof. Samaranayake's inspired the government which declared an Information Technology Week in December 2004. He also continued as Chairman of the International Information Technology Conference till his untimely demise.

01

INTRODUCTION

1.1 UNIVERSITY OF COLOMBO

The University of Ceylon was established by the state council in April 1942. By 1950, the University of Ceylon had gained a reputation as an important centre of excellence in the Commonwealth. The Higher Education Act of 1966 established a National Council of Higher Education (NCHE) and later in 1972, under the University of Sri Lanka Act No. 1 of 1972, all universities were brought under one umbrella and made campuses of a single university and established as the University of Sri Lanka.

The University of Ceylon, Colombo was named the Colombo Campus of the University of Sri Lanka. This system prevailed until 1977. The University autonomy was weakened and as a result, a new Act was introduced in 1978. Under the Universities Act No. 16 of 1978, all campuses of then single university became independent universities. Accordingly, the University of Colombo, Sri Lanka regained its autonomy in 1978. The University of Colombo now consists of five faculties, one school (University of Colombo School of Computing), four institutes and several centers in addition to the Sri Palee Campus.

The University of Colombo is a public state university located primarily in Colombo, Sri Lanka. The University of Colombo is the oldest institute of modern higher education in Sri Lanka, specializing in the fields of natural, social, and applied sciences as well as mathematics, computer sciences, medicine, education, and law. It has been ranked among the top 10 universities in South Asia.

The University of Colombo with a proud history of over 115 years continues in its endeavor to meet the challenge of maintaining its position as the "Metropolitan University, Modern and International in Outlook and Character". The location of the University affords the student population all the advantages of a "metropolitan university", with easy access to international information/ resource centres, libraries, theatres, sports complexes etc.

Its central location within the City of Colombo provides easy access to a wide range of cultural, entertainment and business facilities. The University of Colombo has a multi-cultural multi-ethnic student and staff population, fostering social harmony, cultural diversity, equal opportunity and unity.

The University of Colombo has nine Faculties with 56 Academic Departments, a Campus, a School, 7 Institutes and 8 centres. The following faculties cater to undergraduates as well as postgraduates of the respective disciplines.

- Faculty of Arts
- Faculty of Education
- Faculty of Law
- Faculty of Management and Finance
- Faculty of Medicine
- Faculty of Science
- Faculty of Nursing
- Faculty of Technology
- Faculty of Graduate Studies

1.2 UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

In September 2002, University of Colombo School of Computing (UCSC) was established by merging The Institute of Computer Technology and the Department of Computer Science both of the University of Colombo, as the first centre of higher learning of computing in Sri Lanka. Its main objective was to promote the computing studies at the University of Colombo, which was commenced in 1967 under the guidance of Late Professor Vidya Jothi V. K. Samaranayake who was the founding director of University of Colombo School of Computing.

Currently, UCSC offers degree programmes, both at the undergraduate and postgraduate levels in addition to specialized certificate courses. Carrying out research and development work in the computing is also one of the main key areas contributed by the UCSC. In addition, UCSC also contributes to the national development by contributing Information Communication Technology development in the country. All these activities are planned and carried out considering the following 6 goals under the strategic plan of the UCSC. More details about UCSC including its current activities are regularly published at the *http://www.ucsc.cmb.ac.lk*

DIRECTORS OF THE UCSC

| 2022 - Present | Dr. D A S Atukorale | |

| 2016 - 2022 | Professor K P Hewagamage | |

| 2010 - 2016 | Late Professor G N Wikramanayake | |

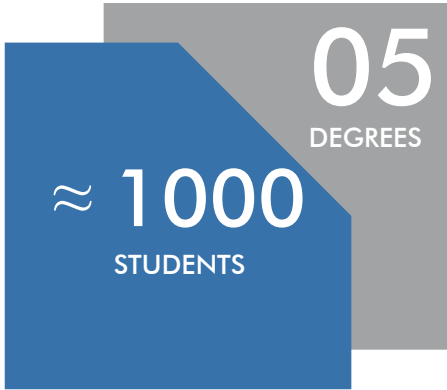| 2004 - 2010 | Dr. A R Weerasinghe | |

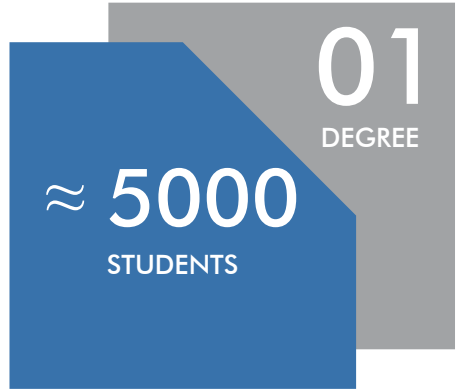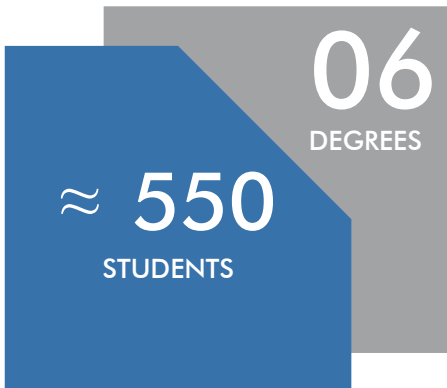| 2002 - 2004 | Late Vidya Jyothi Prof. V K Samaranayake | |

UCSC AT A GLANCE

UNDERGRADUATE

05 DEGREES

≈ 1000 STUDENTS

EXTERNAL

01 DEGREE

≈ 5000 STUDENTS

MASTERS

06 DEGREES

≈ 550 STUDENTS

DEGREE BY RESEARCH

03 DEGREES

≈ 50 STUDENTS
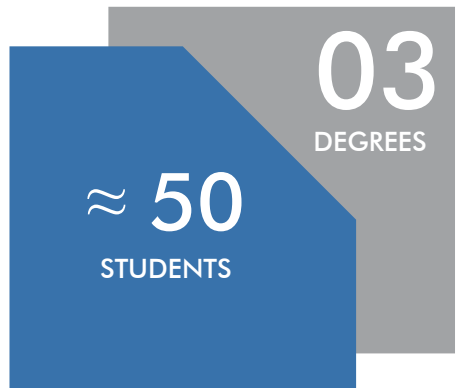
1.3 OUR DEGREE PROGRAMMES

Internal Undergraduate Degree Programmes

Bachelor of Science in Computer Science (BSc. in CS)

Bachelor of Science Honours in Computer Science (BSc. (Hons) in CS)

Bachelor of Science Honours in Software Engineering (BSc. (Hons) in SE)

Bachelor of Science in Information Systems (BSc. in IS)

Bachelor of Science Honours in Information Systems (BSc. (Hons) in IS)

External Undergraduate Degree Programme

Bachelor of Information Technology (BIT)

Postgraduate Degree Programmes

Master of Computer Science (MCS)

Master of Science in Computer Science (MSc. in CS)

Master of Information Technology (MIT)

Master of Information Security (MIS)

Master of Business Analytics (MBAnalytics)

Master of Cybersecurity (MC)

Postgraduate Research Degrees

Doctor of Philosophy in Computing (PhD)

Master of Philosophy in Computing (MPhil)

1.3.1 UNDERGRADUATE EDUCATION IN COMPUTING AT UCSC

The University Grant Commission has issued instructions to all public universities in the circular 995 (Revised) (*https://www.ugc.ac.lk/en/ policy/commission-circulars/98-circulars-published-in-2012-973- 997-/1090-commcircular-995-certification-of-computing-degrees- to-align-with-international-standards.html*) to align computing education according to the international classification of five disciplines. Hence, UCSC conducts 6 degree programmes according to the curriculum guidelines of IEEE-ACM namely, B.Sc. in Computer Science, B.Sc. (Honors) in Computer Science, B.Sc. (Honors) in Software Engineering, B.Sc. in Information Systems, B.Sc. (Honors) in Information Systems and Bachelor of Information Technology (BIT). Except for BIT degree programmes, all other degrees are internal programmes based on the UGC intake policy details of those programmes are available at *https://ucsc.cmb.ac.lk/academic-programmes/ug/*. It is important to mention that UCSC has followed UGC guidelines, including Sri Lanka Qualification Framework (SLQF) levels (*http://www.ugc.ac.lk/ en/all-notices/1156-sri-lanka-qualifications-framework.html*) and IEEEACM curriculum guidelines for computing degrees (*https://www. acm.org/ education/curricula-recommendations*) when developing all these internal and external degree programmes at the undergraduate levels. Hence, all these degrees are acceptable both at national and international level.

1.3.2 POSTGRADUATE EDUCATION

1.3.2.1 MASTERS PROGRAMMES

The UCSC conducts six different masters programmes to cater towards six distinct categories of postgraduate students.

Master of Computer Science (SLQF level 9)

The Master of Computer Science programme is designed for computing professionals who already possess a degree in computing and who wish to acquire a postgraduate qualification in Computer Science.

Master of Science in Computer Science (SLQF level 10)

Master of Science in Computer Science is designed for those who wish to acquire a Computer Science degree with a research focus.

Master of Information Technology (SLQF level 9)

The Master of Information Technology programme is targeted at graduates in disciplines other than computing who wish to pursue a career in an Information Technology related area. This is also suitable for those who wish to specialize in a multi-disciplinary field.

Master of Information Security (SLQF level 9)

The Master of Information Security programme is designed for graduates who wish to acquire a postgraduate qualification in the area of information security. This programme offers mid-career opportunities for those working in the areas of information technology, information system audit and information security.

Master of Business Analytics (SLQF level 9)

The Master of Business Analytics program is designed for graduates who wish to acquire a postgraduate qualification specializing in Data Science with the focus of Business Analytics.

Master of Cybersecurity (SLQF level 9)

University of Colombo School of Computing (UCSC) and Asi@Connect offers distance International Master Program in Cybersecurity which covers the knowledge of Network Security and Cybercrime Investigation with the support of EU funding. It offers postgraduate qualifications for staff members of NRENs and developing country universities in the domain of Network Security and Digital Forensics.

Master of Bioinformatics (SLQF level 10)

UCSC together with the Institute of Biochemistry, Molecular Biology and Biotechnology (IBMBB) offers a full-time Masters degree in Bioinformatics. This programme is administered by the IBMBB.

1.3.2.2 RESEARCH DEGREES

Master of Computing by research (SLQF level 9)

It is a one year fulltime degree programme for graduates who have research experience in their first degree with very good academic records.

Master of Philosophy (MPhil) in Computing (SLQF level 11)

Candidates who have research experience and a good record of computing discipline could register for the Master of Philosophy degree programme fulltime (two years) or Part Time (three years). If they have a

good performance after one year of study, they can request to upgrade the degree to Doctor of Philosophy (PhD) in Computing. Details at https://ucsc.cmb.ac.lk/mphil-programme/

Doctor of Philosophy (PhD) in Computing (SLQF level 12)

Candidates who have a research degree at the level of MPhil or equivalent could register for PhD in computing for a period of 3 years fulltime. His academic records and research experience will be evaluated to determine the suitability of the candidate. There are scholarships for such candidates for these degrees at the UCSC. Details at https://ucsc.cmb.ac.lk/phd-programme/

1.4 STRUCTURE OF THE UCSC

The primary activity of the University of Colombo School of Computing is to deliver quality undergraduate and postgraduate degree programmes in computing. The UCSC has three academic departments, four administration and finance divisions and six centres. The academic staff is allocated to the three academic departments based on their specialization and teaching expertise. The main administration and operational units of UCSC are shown in Figure 1.

Following are the three academic departments based on the research interest.

Academic Departments	Department of Computation and Intelligent Systems (CIS)
	Department of Communication and Media Technologies (CMT)
	Department of Information Systems Engineering (ISE)

Centres

Centres	Advanced Digital Media Technology Centre (ADMTC)
	Centre for Digital Forensics (CDF)
	Computing Service Centre (CSC)
	External Degrees Centre (EDC)
	e-Learning Centre (eLC)
	Professional Development Centre (PDC)

Administration Divisions

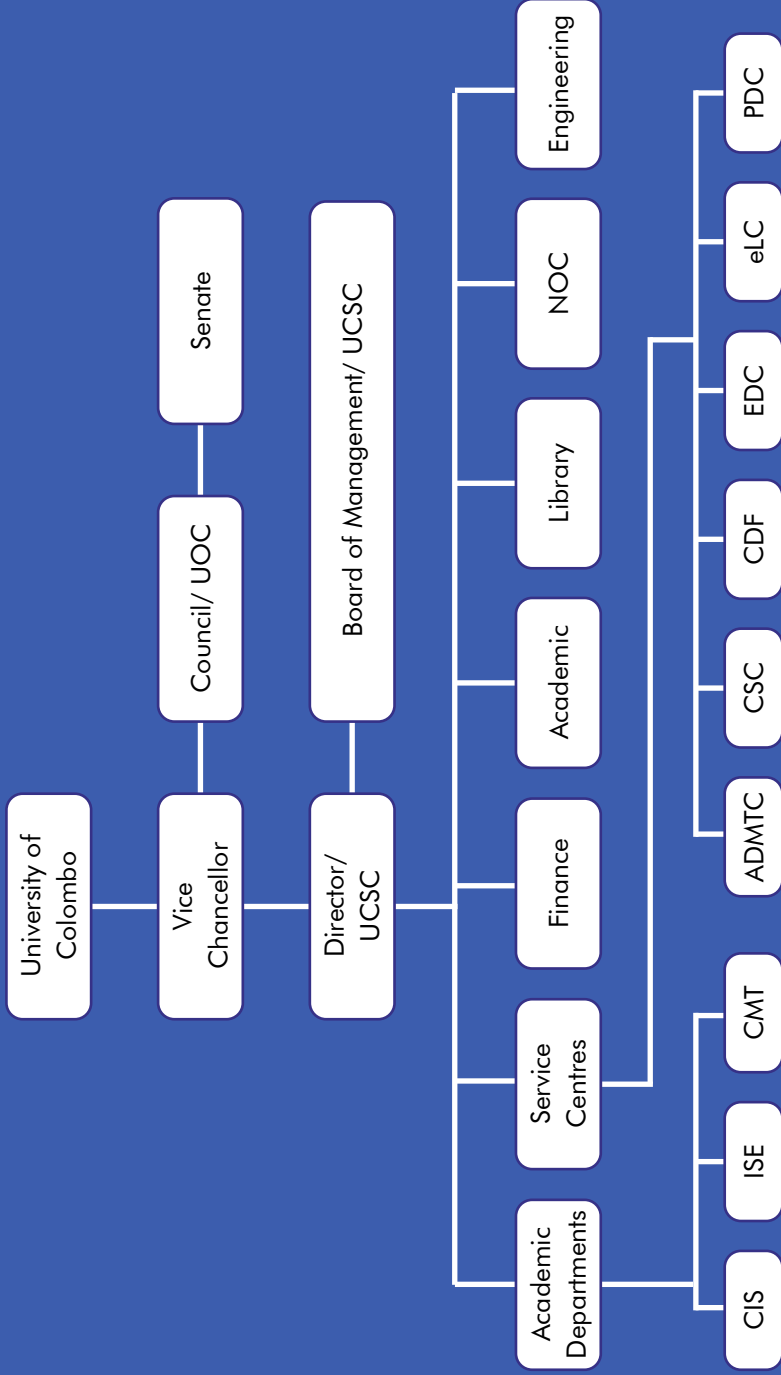|	
Administration Divisions	Administration Division
	Establishments Division
	Academic, Publications and Welfare Division
	Postgraduate, Research and Publications Division
	Examination and Registration Division
	Finance Division
	Quality Assurance Assurance Cell

Figure 1: Main Administration and Operational Units of UCSC

1.5 CENTRES OF THE UCSC

UCSC also performs several secondary activities. These activities are organized under six separate centres. Each centre has a coordinator who manages the day-to-day operations of the centre. The six centres are as follows:

Advanced Digital Media Technology Centre (ADMTC)

Advanced Digital Media Technology Centre (ADMTC) was established under the UCSC in order to implement the "Project for Human Resource Development in Information Technology through capacity building of the UCSC" that was supported by JICA. The centre is equipped with a state of the art digital studio and multimedia laboratories. Centre also conducts several training programmes in Multimedia, e-Learning and Digital Media Production. ADMTC produces many UCSC videos including BIT TV programmes.

> **Coordinator**: Dr. S S P Mathara Arachchi
> For more details visit the website: *https://ucsc.cmb.ac.lk/admtc*

Centre for Digital Forensics (CDF)

Centre for Digital Forensics (CDF) of the UCSC was established in 2011. The advisory panel consists of UCSC and foreign academics. UCSC has played a key role in assisting the Sri Lanka Police and the Criminal Investigation Department since 2003. The centre investigates evidence of digital crimes.

> **Coordinator**: Dr. T N K De Zoysa
> For more details visit the website: *http://www.ucsc.cmb.ac.lk/cdf*

Computing Services Centre (CSC)

The Computing Services Centre (CSC) of UCSC is the main consultancy arm of the UCSC. It conducts system design and development, system recommendation, software project consulting, recruitment testing, tender evaluation, feasibility study and acceptance tests for computer hardware and software. It also conducts tailor-made training programmes for the organizations in both the private and public sectors. The computer service centre also undertakes some software development projects depending on the availability of staff and resources.

> **Coordinator**: Dr. H K T C Halloluwa
> For more details visit the website: *http://www.ucsc.cmb.ac.lk/csc*

External Degrees Centre (EDC)

The main purpose of establishing the External Degrees Centre (EDC) and the three-year external degree programme, Bachelor of Information Technology (BIT) is to widen the higher educational opportunities for the students who have been unsuccessful in meeting the competitive eligibility criteria for admission to the state university system. Another reason has been the massive demand from the ICT industry for high-quality human resources far exceeding the number provided by the state universities. The BIT degree programme commenced in the year 2000 and has so far produced 1242 graduates so far and almost all have been absorbed by the ICT industry. Internal students of the University of Colombo have the right to follow BIT degree programme since it is a part-time programme.

> **Coordinator**: Mr. W V Welgma
> **Academic Coordinator**: Dr. (Ms.) K H E L W Hettiarachchi
> For more details visit the website: *http://www.bit.lk*

E-Learning Centre (e-LC)

eLC is a service Centre of the UCSC established in 2003 to support undergraduate and postgraduate degree programmes and short courses. During the last decade, it has become a national e-learning centre by providing services for both local and international organizations. eLC has a team of dedicated staff to engage with online course development work, provide e-facilitation and conduct research and development work in e-learning.

eLC administers several learning management systems, including BITVLE (http://vle.bit.lk) and FITVLE (https://fitvle.bit.lk/).

>Coordinator: Dr. M I E Wickramasinghe
>For more details visit the website: *http://www.ucsc.cmb.ac.lk/elc*

Professional Development Centre (PDC)

The Professional Development Centre (PDC) of the UCSC was set up to keep a close liaison with the IT industry and to improve the academic programmes through industry partnership. The PDC primarily concentrate on improving the professional skills of the staff and the internal students, industrial placements and visits for internal undergraduates and promoting inter-cultural harmony. The mission of the Professional Development Centre (PDC) of the UCSC is to produce Computing graduates' having extra-curricular skills such as professional skills, business skills, communication skills, community service skills, innovative capacity and entrepreneurship to pursue successful careers thereby contributing to the socio-economic development of Sri Lanka.

>Coordinator: Dr. P V K G Gunawardana
>For more details visit the website: *http://www.ucsc.cmb.ac.lk/pdc*

1.6 MILESTONES IN THE PIONEERING EFFORTS IN COMPUTING OF THE UNIVERSITY OF COLOMBO

1967	First course in computer programming taught in a Sri Lankan University
1968	Establishment of the Statistical Unit
1974	Establishment of the Statistical Consultancy and Data Processing Service
1980	Establishment of Computer Centre
1981	Procurement of the mini computer Data General Eclipse model S/140 with time sharing OS and 16 terminals for Fortran programming
1982	Processing and the release of the results to Sri Lanka Rupavahini corporation of the 1982 presidential election in Sri Lanka with using the BBC computers, considered the first ever computerization of a national event
1982	Proliferation of BBC micro computers over Econet, the first LAN for file sharing, printing and Basic programming in a 30 machine PC lab
1982	Introduction of first generation personal computers – KayPro running CP/M
1984	Tandy Radio Shack TRS model 80 running XENIX for Unix and C programming
1985	Establishment of the Department of Statistics and Computer Science (DSCS)
1985	IBM PC/XT standard PC based on 8086/88 running MSDOS introduced for Labs
1986	Introduction of the first ever Postgraduate Degree in Computing in Sri Lanka
1987	Establishment of the Institute of Computer Technology (ICT) (Supported by JICA)

1988	NEC 430 mainframe donated by Japan with 60 terminals for interactive computing
1989	UNISYS minicomputer for student programming in Fortran, Pascal and Prolog installed through UNDP funds
1989	Next generation PC Labs with 80286/386 processors running Novell Netware 3.11/Widows 3.1 OS
1990	The first Bachelors and Masters degrees in Computer Science commenced by a Sri Lankan university
1992	Installation of Sun Microsystems Sun Workstation Lab with 10 machines with SunOS 4.1.2 and 10Mbps Ethernet for scientific computing
1992	Launch of the Third Country training programme with JICA collaboration
1994	UUCP dial up email service provided for University of Colombo
1997	Internet access via Lanka Education and Academic Research Network via a 64kbps leased line by Sri Lanka Telecom
1997	The British Computer Society accreditation was received for the Computer Science degree
1988	The research thematic International Information Technology Conference was organized by the UCSC and is now succeeded by the International Conference on Advances in ICT for Emerging Regions is technically sponsored by IEEE
1998	Commencement of Graduate Training Programme
1999	ICT Presented with JICA President's award
2000	Establishment of a Campus-wide fibre optic network for UoC through a Swedish Development Grant
2000	Specialised servers like IBM RS/6000 (AIX OS) and Sun UltraSPARC (Solaris 7 OS) for graduates provided
2000	Introduction of the Bachelor of Information Technology (BIT) External Degree
2000	Joint PhD program in computing for academics of Sri Lankan universities with UCSC coordination at Swedish Universities

2000	Sinhala and Tamil languages Unicode specified
2001	Commissioning of Campus Wide Fiber Network (Supported by Sida)
2001	Establishment of the Department of Computer Science (DCS) by splitting DSCS
2002	Establishment of the UCSC by merging the ICT & DCS
2002	Establishment of the Advanced Media Technology Centre (ADMTC) (Supported by JICA)
2002	Commencement of Advanced M.Sc. (Research based) and Master of Information Technology
2002	Launch of the National e-learning centre project funded by SIDA
2002	Implementation of Virtual Learning Environment for BIT (External Degree) using Software System called The Education
2003	PAN Localisation research project for local language computerization with grants form IDRC, Canada
2004	Introduction of the ICT degree programme for students following any of the streams at GCE A/L
2004	Implementation of Virtual Learning Environment for Internal Undergraduates using Moodle
2005	Implementation of Virtual Learning Environment for all UCSC Students
2006	Launch of the UCSC International Journal on ICT for Emerging Regions
2009	Commencement of Linneas-Palmer staff and student exchange program with Umeå University, Sweden
2011	Establishment of the Center for Digital Forensic
2012	Commencement of Masters in Bioinformatics jointly with IBMBB
2012	Software Engineering Specialization was added to the Computer Science Degree Programme
2012	Changing the name of BICT Degree Programme in to Information System after the Curriculum Revision of BICT.

2012	Launch of the Master of Information Security degree
2013	Started Student Exchange Programme with Umea University, Sweden
2013	Computerization of the Registrar General's department, Land Registry and Police Fingerprint matching system
2014	Commencement of construction of the new auditorium building
2015	Commencement of BSc. (Hons) in Software Engineering Degree Programme
2016	Commencement of construction of Canteen, Library, and Administration building of the UCSC
2017	Celebrating the Golden Jubilee of Computing at University of Colombo
2017	Opening of the Vidya Jyothi Prof. V K Samaranayake Auditorium
2017	Restructuring of Master of Information Technology, Master of Computer Science, Master of Information Security (MIS) and Introduction of Master of Science in Computer Science (MSc. in CS)
2018	Introduction of Master of Cybersecurity course
2018	Opening of the Admin Block of the new building
2019	Introduction of Master of Business Analytics course
2020	Work shop Process Improvement and documentation of the Masters Project / Independent Studies.
2020	Published Volume 13 No.1 ICTer Journal – Special Issue
2020	Published Volume 13 No.2 ICTer Journal – Regular Issue
2020	Published Volume 13 No.3 ICTer Journal – Regular Issue
2020	UCSC undergraduate won the 2nd place of eCSW Hacking challenge organized by SL Certs ta the e- Cyber Security week 2020
2021	Published Volume 14 No.1 ICTer Journal – February
2021	Published Volume 14 No.2 ICTer Journal – Special Issue

2021	Published Volume 14 No.2 ICTer Journal – Regular Issue
2021	Commencement of short term course on Hybrid Mobile application Development with Flutter.
2021	The storage system donated buy Mobitel and Huawei Co. was received for academic activities of UCSC
2021	Presented the promotion video of the Video- based Learning content Development for e-Learning and b- Learning at the IIOE Asia Pacific Mid-Year Meeting 2021 conducted by the UNESCO- ICHEI
2021	Signing of an agreement between UCSC and Dialog Axiata PLC to establish a research laboratory (5G Innovation center) in order to enable the students of the University to carry out research activities.
2022	Dr. DAS Athukorale Assumed Duties as New Director of UCSC
2022	Ceremonial Opening of renovated 1st Floor (East Wing) of the UCSC building by the voice chancellor and the Registrar of UOC.

02
BIT DEGREE
PROGRAMME

2.1 OVERVIEW

Taking into consideration the job opportunities that exist for ICT graduates in Sri Lanka & overseas, the UCSC took the initiative to launch the three-year External Degree programme leading towards the award of Degree of Bachelor of Information Technology (External) in the year 2000. This degree programme has been redesigned according to ACM guidelines and Policy Framework for External and Extension programme introduced by the University Grants Commission in the year 2010.

The UCSC has advanced training resources and experience in Sri Lanka in the field of ICT education, and UCSC is the first to offer an External Degree in IT in Sri Lanka. The BIT syllabi are reviewed and updated regularly by considering the international standards such as ACM guidelines, and local and global demand of the IT industry. The BIT degree is awarded by the University of Colombo.

UCSC provides a well-defined detailed syllabus that would help to lay a solid foundation on which, a student can build his career in IT. The syllabi will be constantly updated to meet the industry requirements. Model and past question papers, a list of recommended textbooks are made available to the students. In the year 2003, e-learning was introduced to the BIT students through a Virtual Learning Environment (VLE). This was possible through the assistance given by SIDA (Swedish International Development Agency). VLE assists the students in learning through self-evaluating quizzes, learning material and activities.

The expertise of more than 31 PhD, 05 MPhil, 05 MSc drawn from the University of Colombo, other Sri Lankan and Foreign Universities, and the ICT industry are associated with the programme, which makes BIT the first in Sri Lanka to benefit from such expertise. Currently, more than 50 training institutes spread over the country offer training

programmes for the BIT degree. Among them, 21 training institutes have registered with the UCSC in the year 2021. The list of the BIT registered teaching institutes are presented in the section 9 and also published in the BIT website (http://bit.lk/index.php/learning/training-institutes/).

BIT Programme is designed to:

- produce qualified IT professionals through external mode in addition to the traditional University output
- set professional standards and encourage students to obtain skills in commercial IT applications and in the usage of necessary tools
- enable those who could not enter into a state university to read for a degree in IT due to severe competition in obtaining such a degree from a state university.
- provide an opportunity to those non-graduates already working in the IT sector to obtain a formal qualification through self-study

The minimum duration of the BIT degree programme will be 3 academic years.

- **A Diploma in Information Technology (DIT)** will be awarded to a candidate who has obtained a "PASS" for all the Non-GPA courses, a minimum of a "C" grade for each GPA course, and passed all online assignments as specified in Section 4, in Level I.
- **A Higher Diploma in Information Technology (HDIT)** will be awarded to a candidate who has obtained a "PASS" for all the Non-GPA courses, a minimum of a "C" grade for each GPA course, passed all online assignments as specified in Section 4 in the Level II, and has obtained the Diploma in Information Technology (DIT)
- **BIT Degree Certificate** will be awarded on successful completion of Level I, Level II and Level III examinations and fulfilment of other requirements as specified in Section 4 and 6.

Over 40,000 candidates have enrolled for the BIT programme since its inception in the year 2000 and the 21st consecutive Academic year commenced with Academic year 2021. Statistics of Diploma/ Higher Diploma & BIT Degree Awardees of the last 20 years are summarized in Table 2a.

	1st Year	2nd Year	3rd Year
	DIT	HDIT	BIT
2000/01	171		
2001/02	299	70	
2002/03	596	148	63
2003/04	572	353	113
2004/05	259	164	103
2005/06	346	154	115
2006/07	532	128	108
2007/08	613	386	138
2008/09	438	310	161
2009/10	366	199	140
2010/11	581	309	129
2011/12	659	262	172
2012/13	618	305	194
2013/14	523	339	225
2014/15	379	227	262
2016	403	151	217
2017	337	110	133
2018	436	120	177
2019	651	274	284
2020	575	313	350
2021	491	300	207
Total	9845	4622	3291

Table 2a: Statistics of Awardees of the BIT Programme from Year 2020

2.2 INTERNATIONAL RECOGNITION

The e-BIT programme of the UCSC won a Certificate of Commendation in the Education Planner and Administrator Category of the UNESCO ICT in Education Innovation Awards 2007-2008 and awards at NBQSA and e-Swabhimani.

The UCSC was chosen for this award owing to its innovative use of ICT to scale the output of ICT Professionals much needed by the industry. The e-BIT was designed to optimize the use of ICT for communication, registration, delivery of the curricular content, and examination through its website and associated Virtual Learning Environment. Today, it has become the student portal through which one can learn online, seek assistance from facilitators, and communicate with peers in addition to obtaining examination support material and retrieving results. For this reason, the BIT programme has become the premier 'open' and affordable IT degree programme in Sri Lanka.

The success of the e-BIT can be attributed to the efforts of the e-Learning Centre of the UCSC through its Research and Development (R&D) activities. The curriculum was completely revamped taking into account a new online pedagogy based on a user-centric but collaborative learning model and the constructive alignment paradigm of learning. R&D work in setting up an appropriate Virtual Learning Environment resulted in the adoption and adaptation of the open-source Moodle framework which was customized and localized to form Vidupiyasa – UCSC's "Virtual Learning Environment (VLE) for BIT students". SCORM compatible online learning lessons have been developed based on the redesigned curriculum and made available through the VLE. Additional information regarding the registrations and examinations are made available through the BIT website. An e-assessment system for formative as well as some summative testing has also been developed and deployed.

2.3 JOB OPPORTUNITIES

The 21st Century would be dominated by ICT and there is a growing need for IT professionals and they are sought-after more than ever before, due to the fast-paced world of computer technology and the increasing dominance of IT skills. This, together with the critical shortage of IT professionals today, translates into opportunities for those who are in IT as well as those who are interested in entering the field. Software Development & ICT Services is one sector where Sri Lanka can do well and have highly satisfactory economic returns, which in turn will benefit the national economy. In this context, we need to heighten public awareness on the potential of IT and increase educational opportunities in the sphere.

Considering the above, from the very beginning, the BIT degree programme was designed and developed to cater to the rising demands of the IT industry. Thus, the courses were developed considering the knowledge and skills required to produce high quality IT professionals. As a result, during the last 20 years, the BIT degree programme has been able to maintain its employability rate which is around 90%. According to the latest statistics obtained from the BIT graduates in the year 2020, the employability rate is above 87%. Out of that, 78% are employed on a permanent basis. BIT graduates get an opportunity to work in different sectors such as industry and academia where 61% are employed in the private sector, and 22% are employed in the public sector. 5% of graduates have even obtained foreign employment opportunities. It shows that the BIT degree programme is capable of catering to the demands of the industry as the majority of the BIT graduates are employed as Software Engineers, Data Analysts, QA/Test Engineers, UX Engineers, Web Developers, Business Analyst, Network Administrators, Information Security Analyst, Project Managers, ICT/IT Lecturers, etc. which are among the most sought-

out and high-demand areas. Also, a significant number of graduates who have followed the BIT degree programme was able to enter into postgraduate programmes in local as well as foreign universities because of the strength of the curriculum and some of them have even completed doctoral studies as well.

03

REGISTRATION

3.1 ADMISSION REQUIREMENTS

The following admission requirements will be effective for Academic Year 2022.

No person may be registered as a candidate for the Examinations leading to the Degree unless he/she satisfies (A) and (B) below:

(A) he/she

(i) three passes in the GCE Advanced Level examination in one sitting (New Syllabus) after 2000 or four passes in the GCE Advanced Level examination in one sitting (Old Syllabus) before 2000.

OR

(ii) has obtained any other educational qualification deemed equivalent to the qualification referred to in paragraphs (i) above by the Senate on the recommendation of the Academic Syndicate of the UCSC and has passed a Selection Test* conducted by the UCSC;

OR

(iii) has passed all the theoretical components of the Foundation in Information Technology (FIT) Programme conducted by the UCSC;

AND

(B) he/she

(i) has obtained at least six passes in G.C.E. Ordinary Level with three Credits including for Mathematics and English;

OR

(ii) has obtained any other educational qualification deemed equivalent to the qualification referred to in paragraph (B)(i) above by the Senate on the recommendation of the Academic Syndicate of the UCSC.

Note:
* Selection Test = FIT

3.2 SELECTION PROCEDURE

Calling of applications for the Diploma in IT of the BIT degree programme will be published in the press, social media and the BIT website annually. In accordance with such notices, prescribed application forms should be completed online, from the BIT website and forwarded to the External Degrees Centre (EDC) of the UCSC with payment of appropriate fees (see table 8a) and required documents (see section 3.3.1). Degree path is shown in Figure 3a.

3.3 REGISTRATION

The selected students will be informed to register for the Level I of the BIT degree programme. Initially students will be granted only a provisional registration.

Proper Registration would be given only after the qualifications (e.g. Advance Level, Ordinary Level and other) are verified by the EDC of UCSC. Registration is valid for a period of one academic year. The students have to pay the registration fee annually to keep their registration valid and sit for examinations.

The registration of a student is cancelled, if he/she is not registered for 3 consecutive academic years. This rule will be effective irrespective of the level of registration from 2018 onwards. The maximum period a student can attempt an evaluation in each level of study (Level I, II or III) shall not exceed three (3) consecutive years from the initial registration of a particular year of study. If a student fails to do so, he/ she should be registered as a new student.

Registering for BIT@UCSC will not disqualify any student from registering for any other internal or external degree offered in any other state university.

3.3.1 DOCUMENTS REQUIRED FOR PROVISIONAL REGISTRATION

Originals & Photo copies of the following:

- National ID Card (for Sri Lankan citizens)/valid Passport (for foreign nationals)
- Birth Certificate
- Marriage Certificate (Where necessary)
- Educational certificates
  - (a) For Candidates who have obtained three passes in the GCE Advanced Level examination in one sitting (New Syllabus) after 2000 or four passes in the GCE Advanced Level examination in one sitting (Old Syllabus) before 2000
    - (i) GCE O/L Certificate
    - (ii) GCE A/L Certificate
  - (b) FIT Letter issued by University of Colombo School of Computing (for those who have not qualified through GCE A/L)
- Copies of colour photographs of passport size (on Red Background and Candidate's ears should be clearly visible in each and every photo)
- One attested photo pasted on an A4 size paper and attested by an authorized person*. The signature and the seal of the authorizing person should be placed across the photograph as not to cover the face of the candidate.
- Self Addressed Envelope of size 9"X4" with Rs.110/= stamp.
- Affidavits (If the name appears in other Educational Certificates is different than that in the Birth Certificate)

*Head or Retired Head of a Government/Director Managed approved school, Grama Niladhari of the Division, Justice of Peace, Commissioner of Oaths, Attorney at Law, Notary Public, Commissioned Officer of the

armed forces, Staff Officer of Govt./ Corporation, the Chief Incumbent of a Buddhist Vihara, A religious Dignitary of standing of any other religion.

The documents required may change from, time to time. Therefore the students are requested to adhere to the instructions given by the EDC of UCSC in this regard. Students are also bound to submit any additional documents to the EDC upon request if further verifications are needed to grant student registration.

3.3.2 LATERAL ENTRY REGISTRATION REGISTRATION

Lateral Entry Registration is granted for the students who have exited the degree programme after obtaining Diploma in Information Technology (DIT) or Higher Diploma in Information Technology (HDIT) and wish to continue the Degree programme at a later stage. They can enroll in Level II (year 2) or Level III (Year 3) as instructed below.

Those who have successfully completed the level I (year 1) of the BIT degree and obtained the DIT qualification offered by the UCSC can directly register for the Level II (Year 2) of the BIT degree programme as a new student.

Those who have successfully completed the Level II (Year 2) of the BIT degree and obtained HDIT qualification offered by the UCSC can directly register for the Level III (Year 3) of the BIT degree programme as a new student.

To be eligible for this lateral entry registration, the applicant must fulfil the following conditions:

He/she must have

1. Registered in the degree programme on or before the academic year 2017
2. Completed the DIT/HDIT on or before the year of registration
3. Six passes in G.C.E. Ordinary Level with three Credits including for Mathematics and English
   And
4. Passed all three subjects of the new syllabus (on or after the year 2000) or all four subjects in the old syllabus (before 2000) in the GCE Advanced Level Examination in one sitting
   Or
5. Passed all theoretical components of Foundation of Information Technology (FIT) conducted by UCSC
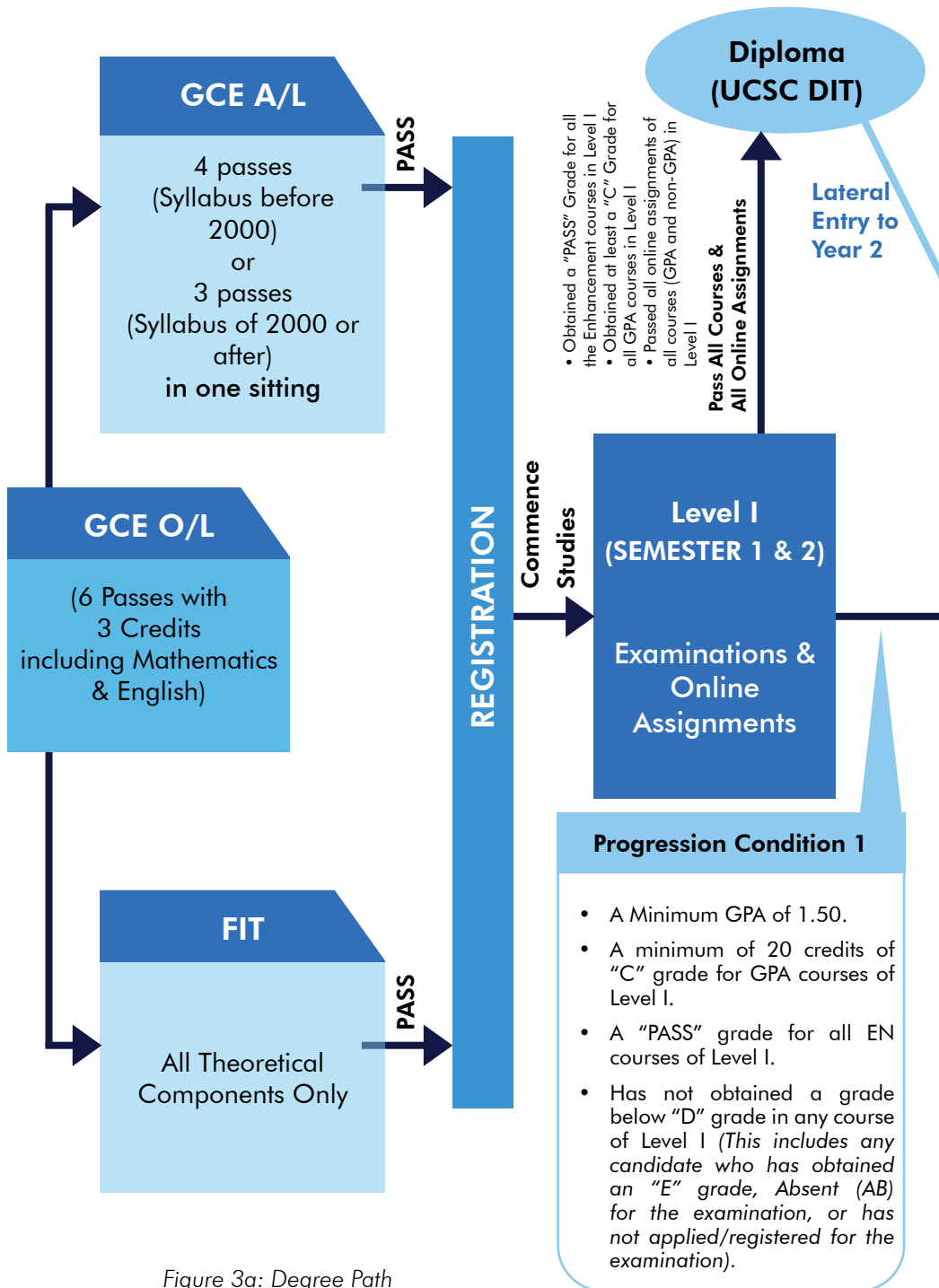
GCE A/L

4 passes
(Syllabus before 2000)
or
3 passes
(Syllabus of 2000 or after)
in one sitting

PASS

GCE O/L

(6 Passes with 3 Credits including Mathematics & English)

FIT

All Theoretical Components Only

PASS

REGISTRATION

Commence Studies

- Obtained a "PASS" Grade for all the Enhancement courses in Level I
- Obtained at least a "C" Grade for all GPA courses in Level I
- Passed all online assignments of all courses (GPA and non-GPA) in Level I

Level I (SEMESTER 1 & 2)

Examinations & Online Assignments

Pass All Courses & All Online Assignments

Diploma (UCSC DIT)

Lateral Entry to Year 2

Progression Condition 1

- A Minimum GPA of 1.50.
- A minimum of 20 credits of "C" grade for GPA courses of Level I.
- A "PASS" grade for all EN courses of Level I.
- Has not obtained a grade below "D" grade in any course of Level I *(This includes any candidate who has obtained an "E" grade, Absent (AB) for the examination, or has not applied/registered for the examination).*

Figure 3a: Degree Path

- Obtained a "PASS" Grade for all the Enhancement courses in Level II
- Obtained at least a "C" Grade for all GPA courses in Level II
- Passed all online assignments of all courses (GPA and non-GPA) in Level II
- Obtained the Diploma in Information Technology (DIT) from the University of Colombo.

Pass All Courses & All Online Assignments + DIT

Higher Diploma (UCSC HDIT)

Lateral Entry to Year 3

Level II (SEMESTER 3 & 4)

Examinations & Online Assignments

Level III (SEMESTER 5 & 6)

Examinations + Individual Project

Degree (BIT)

Progression Condition 2

- A Minimum GPA of 1.50.
- A minimum of 20 credits of "C" grade for GPA courses of Level II.
- A "PASS" grade for all EN courses of Level II.
- Has not obtained a grade below "D" grade in any course of Level II *(This includes any candidate who has obtained an "E" grade, Absent (AB) for the examination, or has not applied/registered for the examination).*

Progression Condition 3

- A Cumulative GPA >= 2.00.
- A minimum of 90 GPA credits with at least 30 GPA credits from each level.
- A minimum of 20 credits of "C" for GPA courses AND "PASS" grade for all EN courses in each Level.
- At least a "C" grade for Software Development Project in Level III.
- A "PASS" grade for all EN courses in each Level.
- Has not obtained a grade below "D" grade in any course in each level.

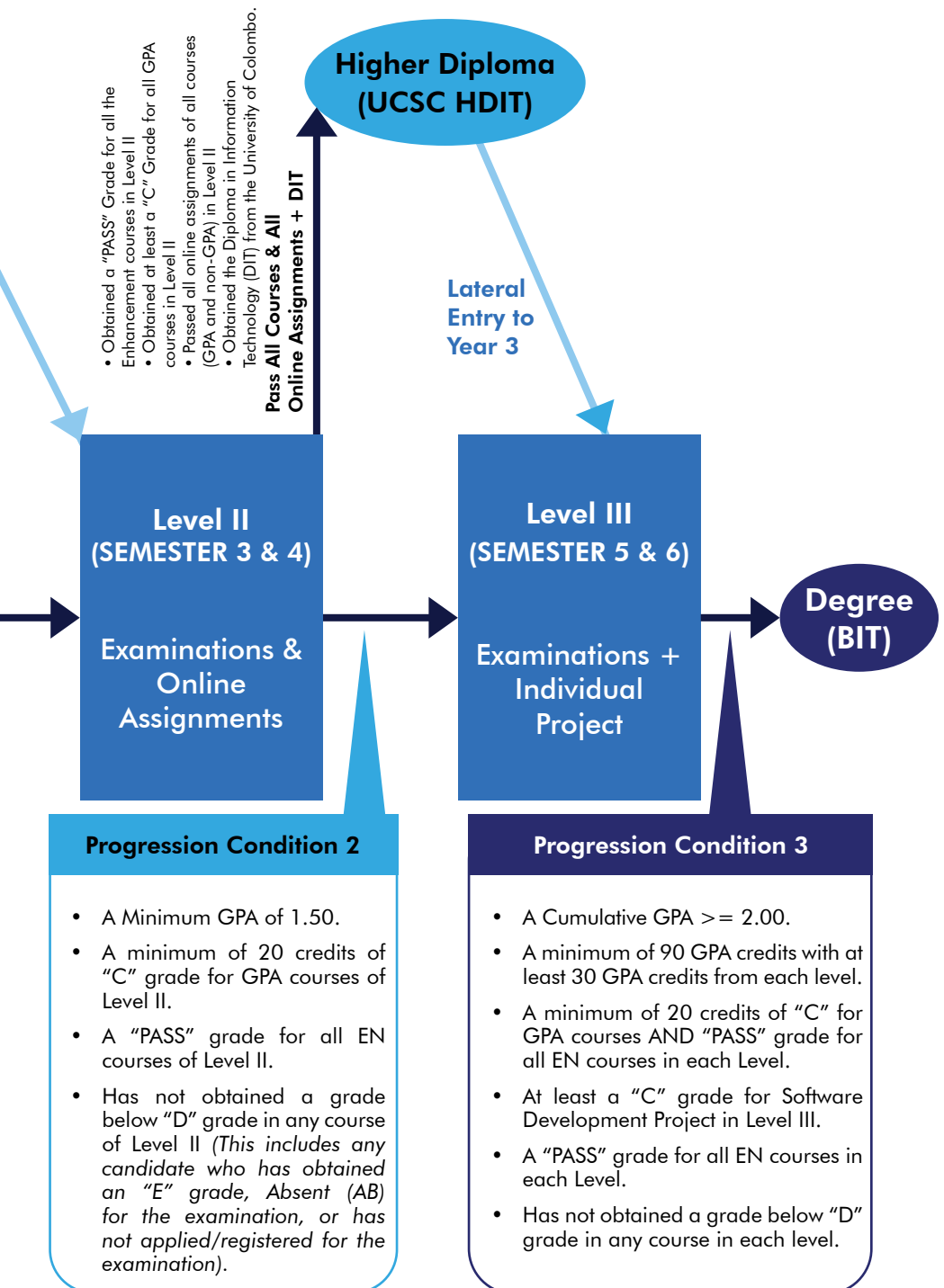### 3.3.3 REGISTRATION NUMBER

The registration number will be given to the students at the registration and a BIT Identity Card will also be issued. All inquiries regarding any matter pertaining to the BIT degree programme must be accompanied by this registration number. Further instructions for BIT Degree related information is given in section 10.3.

3.3.4 BIT IDENTITY CARD

The BIT Identity Card remains as a property of the student until such time; the student obtains the Degree of Bachelor of Information Technology. Thereafter, the student should return it to the External Degrees Centre (EDC) of UCSC. If the BIT Identity Card is lost, a duplicate will be issued on payment (For payments refer Section 8). An affidavit should be produced to obtain the duplicate. Student should be physically presented for the ID photo which is taken by the UCSC on his/her registration interview unless informed otherwise. Students will not be allowed to sit for an examination without a valid BIT Identity Card.

3.3.5 CANCELLATION OF REGISTRATION

Any student may obtain cancellation of his student registration subjected to the approval of the Board of Study. In such an event the UCSC will retain only 25% of the registration fee if a written request is made within 30 days from the closing of registration. Otherwise no refund is made. No requests for cancellation will be entertained from students awaiting the results of an examination or pending disciplinary action in respect of any examination malpractice. To cancel a registration, the BIT ID card should be handed over to the EDC.

3.3.6 RENEWAL OF REGISTRATION

All students are required to renew their registration within a prescribed period after the release of results of Level I, II and III examinations. Renewal process is done online and Payments can be done online or by bank using the prescribed voucher.No other payment method will be granted unless the student is specifically informed by the EDC in writing to do so. Students will be informed whether they have to register/re-register for the next academic year depending on their examination results. A student has no right to claim to sit any examination after expiry of the period of registration. Hence, a student whose registration has lapsed must request the EDC in writing in order to renew the registration. To access online material and to take part in online assignments and assessments, the renewal of registration must be done before the given deadline.

If a registered student would not continue his/her registration for any academic year he/ she will have to renew student registration by paying a surcharge, up to the current registration year.

The students should complete any academic year within three years. If a student fails to do so, he/ she should be registered as a new student.

3.4 VIRTUAL LEARNING ENVIRONMENT (VLE) FOR BIT

Students will be given a login (a username and a password) to the VLE for BIT at the registration, and this login account is renewed at the beginning of each academic year of the BIT programme. http://vle.bit.lk is the Virtual Learning Environment established for the BIT students. You are requested to refer/check the VLE frequently for the programme and course level information.

Course materials, online assessments, online assignments, past papers, course related notices, announcements, deadlines for various submissions, extensions, exam timetables, notices about exam applications, admission cards and many other useful information are available at the VLE.

When new students are registered, they will be given a Student Registration Number which will be the username to access the VLE for BIT. You will be given a password once the registration process completes successfully. You must have an email address to access the services of VLE for BIT.

Each course in the BIT programme has two or more online assignments. In order to obtain the Diploma/ Higher Diploma certificates, you should pass all the assignments in the relevant level of the degree programme.

The students, who are registered for the Level III Software Development Project, are given a separate login to the Project-VLE (http://vle.bit.lk/project) for project related studies/submissions.

If there is any issue with accessing the VLE, the students should contact the VLE Administrator through email (admin@vle.bit.lk), indicating his/

her registration number, index number, and the NIC number.

During the office hours, students could contact EDC, UCSC, and eLC using the email address and the contact numbers given in the Contact section.*

Note:

* For all email communications, a student should include his/ her registration number, index number, NIC, full name as it appears in the BIT Student ID, and a contact number on which the student can be reached.

3.5 BIT FREQUENTLY ASKED QUESTIONS (FAQ)

The BIT Frequently Asked Questions (FAQ) consist of common questions and answers related to the BIT Degree Programme. The questions are categorized into 13 areas of information covering all questions asked often by the students about the BIT Programme: general information, entry qualifications, BIT applications, BIT registrations, BIT Programme structure, VLE(LMS), BIT re-registration, BIT Identity card, BIT exams, VLE online assignments and assessments, courses, certificates/ transcripts and other. It is available online on the BIT website and on the BIT VLE. The students are encouraged to refer to the BIT FAQ, prior to contacting the staff directly via email, telephone or by visiting UCSC, for any question related to the degree programme.

3.6 BIT WEBSITE (WWW.BIT.LK)

The official website for the BIT degree program is www.bit.lk. All the information regarding your degree program can be found through the BIT website. Information on the website is organized under a few categories to maintain the simplicity of the site.

In the home page of the site, you can find the latest student handbook and all kinds of application forms as well as the bank vouchers which to be used in the registration process. Most importantly, all the general notices related to the degree program are published in the BIT website home page. That includes the BIT examination timetable, final year project schedule and any alternations for already published schedules.

Information like the history about the BIT degree program, statistics, employability and entry requirements for the program can be found under the "About BIT" page of the site. Registration details, examination process and the examination results are also accessible through the website. You are strongly advised to refer the BIT website frequently throughout your degree programme because the website will be the main communication channel between you and the UCSC.
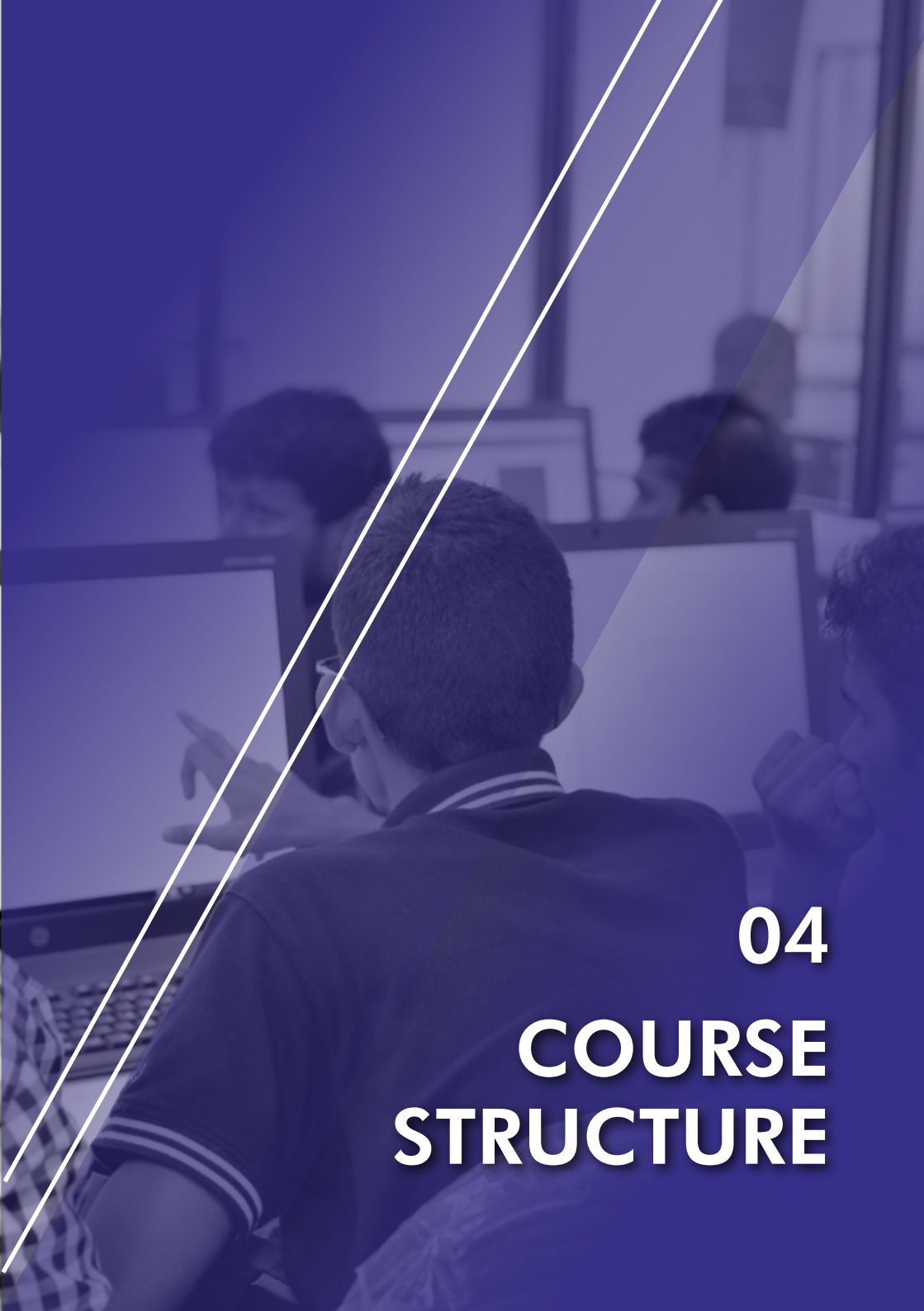
04

COURSE STRUCTURE

4.1 OVERVIEW

This programme consists of three levels: Level I, Level II, and Level III with two semesters in each level. All courses offered in the first two levels are compulsory whereas, in Level III, optional courses are offered in addition to the compulsory courses. Some of the compulsory courses offered are Enhancement courses which are designed to strengthen students' communicational, mathematical, managerial, entrepreneurial, and emerging IT skills. Enhancement courses are identified using EN as the first two letters of the course code. EN courses are non-GPA courses. Therefore, the credit value of an EN course is not considered for GPA calculation.

Candidate must select a minimum of 30 GPA credits from each level including all compulsory courses. All courses in Level I and Level II are compulsory and each of them has online assignments. All Enhancement courses in Levels I, II and III are compulsory.

4.2 LEVELS

4.2.1 LEVEL I

All courses (Table 4a) are compulsory with online assignments

LEVEL I (All courses are compulsory with online assignments)				
Code	**Name**	**Semester**	**Credits**	**GPA Credits**
EN1106	Introductory Mathematics	1	2	-
IT1106	Information Systems	1	4	4
IT1206	Computer Systems	1	4	4
IT1306	Free and Open Source Software for Personal Computing	1	3	3
IT1406	Introduction to Programming	1	4	4
EN2106	Communication Skills I	2	2	-
IT2106	Mathematics for Computing I	2	3	3
IT2206	Fundamentals of Software Engineering	2	4	4
IT2306	Database Systems	2	4	4
IT2406	Web Application Development I	2	4	4
Total Number of Credits			**34**	**30**

Table 4a: Level I Courses

LEVEL

I

4.2.1.1 COURSE DESCRIPTIONS

EN1106   Introductory Mathematics

The main objective of this course is to provide core mathematical knowledge and skills that are essential for a student of ICT. This course covers topics of Numbers and Arithmetic Operations, Basic Algebra, Solving Equations and Inequalities, Fundamentals of Measurements, Percentages and Ratios, Fundamentals of Sequences and Series, Indices and logarithms, and Modular Arithmetic. After completion of this course, students will be able to solve mathematical problems quickly and efficiently; and relate the mathematical concepts to ICT.

IT1106   Information Systems

This course covers topics of Information System Concepts and Technologies, Information Systems for Organizations and Globalization, Electronic and Mobile Commerce, Electronic Business Systems, Specialized Systems and New Technologies, Information system Acquisition, and Security, Ethical, Privacy and Other Challenge. After completion of this course, students will be able to describe components of information system infrastructure; explain the role of information systems and in globalization; analyze different types of information systems and their uses; describe the information system acquisition process; provide appropriate information system solutions to meet the organizational requirements; evaluate information system contributions to the strategic management of an organization; identify possible vulnerabilities in a given context and take necessary precautions to protect information systems; and ensure safety, privacy of information system users and sustainability of information systems.

IT1206   Computer Systems

This course covers topics of Introduction to Computer Systems, Data Representation and Arithmetic, Boolean Algebra and Circuit Design, Combinational and Sequential Logic Circuits, CPU Organization and Instruction Set Architecture (ISA), Input and Output Devices, Volatile and Non-Volatile Storage, Expansion Cards and System Interfaces, System Software and Utilities, Introduction to Networks, and System Maintenance and Troubleshooting. After completion of this course, students will be able to describe the basic operations of a computer; design simple logic circuits; and describe components of Central Processing Unit (CPU) with CPU cycle and its use to execute instructions in a computer.

IT1306   Free and Open Source Software for Personal Computing

The course covers topics of Introduction to FOSS -Free and Open-source Software, Managing Files and Folders in a FOSS Operating System, Word Processing for Electronic Documentation, Spreadsheet for Calculation, Databases for Processing Data, Presentations for Effective Communications, and Multimedia Content Development. To get students familiarized with this open-source environment, as the main medium Ubuntu operating system, LibreOffice suite, and the GIMP graphic design software are used. After completion of this course, students will be able to distinguish different types of open source software for personal computing and their use; use files and folders in an open-source operating system; prepare documents using an open-source word processing application; prepare spreadsheets using open-source spreadsheets application; prepare databases using an open-source database management application; prepare presentations using an open-source presentation application; and prepare visuals using an open-source graphic design application.

IT1406   Introduction to Programming

This course covers topics of History and Evolution of Java, Interacting with Java Programming environment, Fundamentals of Java Programming, Computer program design, Object Orientation, Packages and interfaces, Exception handling, Enumerations, Autoboxing and annotations (Metadata), Understanding generics, and Overview of some classes of the Java library. After completion of this course, students will be able to design and develop programs for specified tasks using Java as an Object-Oriented Programming Language.

EN2106   Communication Skills I

This course covers topics of Writing and Typing, Writing for a Purpose, Listening for a Purpose, Small Talk and General Communication Skills, Presentations and Public Speaking, Reading for a Purpose, and Summarizing and Paraphrasing. After completion of this course, students will be able to identify the correct formation of letters and mechanics of writing for the English language; demonstrate accuracy and efficiency in typing in the English language; create well-organized essays, reports, CVs, Cover letters and questionnaires that are structured according to acceptable standards; demonstrate skills in retrieving information by listening; illustrate professional speaking skills in general communication, presentations and public speaking; apply and demonstrate effective telephone skills; apply and demonstrate effective interview skills to face and conduct interviews; illustrate professional speaking skills in general communication, presentations and public speaking; demonstrate a critical understanding of reading comprehension and comprehension strategies; and apply practices required to summarize and paraphrase a given text.

IT2106   Mathematics for Computing I

This course covers topics of Sets, Logic, Relations and Functions, Boolean Algebra, Techniques of Counting, and Probability. After the completion of this course, students will be able to define and give examples of basic mathematical objects such as sets, relations, functions and Boolean algebras; describe basic concepts of mathematical logic and use it to analyze and establishing truths about mathematical statements; use basic notions of counting, such as permutations, combinations and pigeon hole principle, to enumerate well-defined sets; describe basic concepts and probability theory, mean and variance to give quantitative descriptions of probabilistic events; and acquire the discrete mathematics skills needed to analyze, model and solve problems in Information and Communication Technology.

IT2206   Fundamentals of Software Engineering

The main objective of this course is to provide a broad understanding of the software engineering process, concepts and the systematic development and management of software projects. This course covers topics of Introduction, Software Processes, Agile Software Development, Requirement Engineering, System Modeling, Architectural Design, Design and Implementation, Software Testing, and Software Evolution. After completion of this course, students should be able to explain the software engineering principles and techniques that are used in developing quality software products; and apply software engineering principles and techniques appropriately to develop a moderately complex software system.

IT2306   Database Systems

This course covers topics of Introduction to DBMS, Relational Data Model, Database design process, Relational Algebra, Data Manipulation using SQL, Data Security, and Data normalization process and the normal forms. After completion of this course, students will be able to describe the role of a database management system the three-schema architecture and the difference between conceptual, external and physical schemas; demonstrate how organizational data can be modeled to produce conceptual schema by using ER data modeling concepts to cater for the data requirements of that organization; convert the conceptual model into relational schema; list the operations of relational algebra and show how they can be used to create new relations from existing relations; formulate SQL queries of varying complexity; describe view concept and discretionary access control as security mechanisms of database systems; and demonstrate how relations can be normalized up to 3rd normal form.

IT2406   Web Application Development I

This course covers topics of Web page design with HTML, Cascading Style Sheets (CSS), Client-side programming with JavaScript, Fundamentals of XML, Introduction to frontend development using Bootstrap, and Introduction to web development stacks using MEAN. After completion of this course, the students will be able to identify the main concepts in the web development environment; design web pages using HTML and CSS; use JavaScript to increase the interactivity of the web pages; create server scripts using PHP; use SQL and database concepts; discuss the skills and project-based experience needed for entry into web design and development careers; use a variety of strategies and tools to create websites; design responsive web pages using Bootstrap; and apply web development concepts with MEAN Stack.

4.2.2 LEVEL II

All courses (Table 4b) are compulsory with online assignments.

LEVEL II (All courses are compulsory with online assignments)				
Code	Name	Semester	Credits	GPA Credits
EN3106	Communication Skills II	3	2	-
IT3106	Object Oriented Analysis & Design	3	3	3
IT3206	Data Structures and Algorithms	3	3	3
IT3306	Data Management Systems	3	3	3
IT3406	Web Application Development II	3	4	4
IT4106	User Experience Design	4	3	3
IT4206	Enterprise Application Development	4	4	4
IT4306	Information Technology Project Management	4	3	3
IT4406	Agile Software Development	4	4	4
IT4506	Computer Networks	4	3	3
Total Number of Credits			**32**	**30**

Table 4b: Level II courses

LEVEL II

4.2.2.1 COURSE DESCRIPTIONS

EN3106   Communication Skills II

This course covers topics of Introduction to Communication Skills II, Importance of Personal Development, Reading & Comprehension, Professional Responsibility, ethics and Plagiarism, Technical Writing and effective communication, Visual Communication, and Team Work and Collaboration. After completion of this course, the students will be able to express concepts/ideas/proposals effectively to different audiences/ stakeholders in a given context; employ various tools and technologies in aid of effective professional and technical communication; analyze the technical documents; create well-organized technical reports that are structured according to acceptable standards; describe how values and attitudes influence work management and communication; apply practices required to be a significant team player in a collaborative working environment; illustrate essential soft skills and technical skills for effective communicating within a team environment; describe and critique different ways of conflict management to build stronger teams; recognize the diversity in communication by giving due consideration to gender, culture, accessibility, digital divide, and economic issues in the society; and demonstrate responsible behavior in the communication knowing the legal implications/consequences of irresponsibility and misconduct.

| IT3106 | Object Oriented Analysis & Design |

The main objective of this course is to provide the necessary skills and competencies to analyze and design a system using object-oriented approach. This course covers topics of System Concepts for Object Modelling, Object-Oriented Software Development Process, Computer-Aided Systems Engineering, Business Process Identification with Use Case Modelling, Business Process Modelling with Activity Diagrams, Structural Modelling using Class, Package Diagrams, Behavioural Modelling using Interaction Diagrams, Behavioural State Machines and Other UML diagrams, Object-Oriented Design, Component-Based Software Engineering, and System Modelling Using Case Studies. After completion of this course, the students will be able to describe Object-Oriented Analysis and Design concepts and apply them to solve problems; define UML (Unified Modeling Language) and its various types of diagrams; prepare Object-Oriented Analysis and Design documents for a given problem using Unified Modeling Language; explain the transition from analysis to design; and describe the key activities in the component-based software engineering (CBSE) process.

| IT3206 | Data Structures and Algorithms |

The main objective of this course is to provide fundamental knowledge in the application of different data structures and algorithmic processes. Further, this provides knowledge in the sorting and searching algorithms. Finally provides skills to use data structures and algorithms for problem-solving activities. This course covers topics of Introduction to Data Structures, Arrays and Linked Lists, Stacks and Queues, Recursion, Trees, Graphs, Analysis of Algorithms, and Sorting and Searching Algorithms. After completion of this course, students should be able to explain common data structures and their applications; explain common searching and sorting algorithms and their applications;

and apply data structures and algorithms inappropriate real-world problem-solving activities.

| IT3306 | Data Management Systems |

The main objective of this course is to provide knowledge of different data management techniques with insight on distributed database systems and other advanced database concepts. This course covers topics of Data Management Evolution, Database Constraints and Triggers, Database Indexing and Tuning, Distributed Database Systems, and Consistency and Transaction Processing Concepts. After completion of this course, students should be able to describe how and why different data management techniques evolved; apply constraints and maintain consistency through triggers; describe data storage & improve query performance by using indexes; describe consistency and transaction processing techniques in different data management systems; and describe distributed database concepts and create designs for distributed databases with an insight on how data fragmentation, replication and allocation affect database performance.

| IT3406 | Web Application Development II |

The main objective of this course is to provide an insight into the server-side web development technologies along with the advances features, methods and tools needed to add interactivity to produce rich internet applications. This course covers topics of Server Side Web Development using PHP & MySQL, Fundamentals of Asynchronous JavaScript and XML (AJAX), Advanced Client-Side Development, and Introduction to web application security. After completion of this course, students should be able to describe and apply the fundamental and advanced concepts of PHP; describe the MVC architecture; employ Advanced features of client-side programming using JavaScript and Ajax to add interactivity to web pages; employ JavaScript libraries in web pages; and describe and employ fundamental features of web security.

IT4106   User Experience Design

The main objective of this course is to provide a holistic understanding of User Experience Design and to introduce the state of the art design and evaluation techniques practiced in the industry in designing interactions. This course covers topics of Introduction to Interaction Design and User Experience, Conceptual Interaction, Cognitive, Social and Emotional aspects of Design, Interfaces focused in User Experience Design, Data Gathering in UX, Data Analysis and Interpretation in UX, Designing Prototypes, and Evaluating Designs. After completion of this course, students should be able to explain the difference between good and poor User Experience Design (UXD); describe what interaction design is and how it relates to human-computer interaction and UXD; explain the main principles of a user-centered approach; describe what a conceptual model is and how to begin to formulate one; outline the core interaction types for informing the development of a conceptual model; explain what cognition is and why it is important for UXD; explain how our emotions relate to behavior and the user experience; discuss how to plan and run a successful data-gathering program; discuss the difference between qualitative and quantitative data and analysis; analyze data gathered from questionnaires, interviews and observation studies; interpret and present findings in a meaningful and appropriate manner; develop personas and scenarios for user requirements; describe prototyping and the different types of prototyping activities; produce simple prototypes from the models developed during the requirements activity; explain the key concepts user experience evaluation; and conduct User Experience evaluations with various methods.

IT4206   Enterprise Application Development

The main objective of this course is to provide a proper understanding about the concepts of enterprise application development and encourage the students to develop a high performing, scalable and secure enterprise application with JavaEE. This course covers topics of Introduction to Enterprise Application Development, Remote Method Invocation, Component-Based Application Development, Overview of JEE, Enterprise Java Beans, Object Relational Mapping with the Java Persistence API, Servlet Development and Deployment, JSON Processing, Web Services, Web Socket, and Comparative Study on EJB specifications. After completion of this course, students should be able to explain the enterprise application and the architecture of an enterprise application; apply design considerations with respect to enterprise application development; and design and develop Java enterprise applications which suit the enterprise requirements.

IT4306   Information Technology Project Management

Project management is an essential aspect of any project. As is the case, IT project management presents a unique set of aspects as well as challenges to the overall aspects of a project. This course introduces aspects to manage an IT project. This course covers topics of Introduction to Project Management, Project Management and IT Context, The Project Management Process Groups, Project Integration Management, Project Scope Management, Project Schedule Management, Project Cost Management, Project Quality Management, Project Resource Management, Project Communications Management, Project Risk Management, Project Procurement Management, and Project Stakeholder Management. After completion of this course, students should be able to demonstrate knowledge of project management concepts, methodologies and techniques; identify major roles in a software project and how to manage a software project; detect and

resolve issues associated with project management; and develop various project teams for different kinds of information technology projects.

IT4406   Agile Software Development

This course focuses on the software development process using the Agile approach. Students will master Agile approaches primarily Scrum and an introduction to other approaches such as Extreme Programming, Lean, and Kanban. The lifecycle and practices of Scrum will be covered in detail. This course covers topics of Introduction to Agile Software Development, Agile Principles, Introduction to Scrum, Core Concepts in Scrum, Scrum Roles, Scrum Planning, Sprints, Introduction to Testing in SCRUM, and Extreme Programming (XP). After completion of this course, students should be able to obtain a firm foundation on Agile concepts and methodologies; acquire an understanding of the practices and application of Agile practices Scrum; learn how to apply the Agile framework in software Development Projects; and learn fundament concepts of Extreme Programming.

IT4506   Computer Networks

The main objective of this course is to provide a broad understanding and describing the basic principles behind computer network designs and implementations. This course covers topics of Introduction to Computer Networks, Physical Layer, Data Link Layer and MAC sublayer, Network Layer, Transport Layer, Application Networking Services, Network Management, and Software Defined Networks. After completion of this course, students should be able to describe the functionality of IP networks with reference to the TCP/IP model; demonstrate the use of computer network principles in identifying suitable network parameters for a network solution; explain the behaviour of a computer network by using computer network principles; and analyse a given scenario and identify issues based on computer network principles.

4.2.3 LEVEL III

LEVEL III Courses (Select all Compulsory (C) and optional (O) courses to complete 30 GPA credits)					
Code	Name	Semester	Credits	GPA Credits	Course Type
EN5106	Fundamentals of Management & Entrepreneurship	5	2	-	C
IT5106*	Software Development Project	5 & 6	8	8	C
IT5206	Professional Practice	5	3	3	C
IT5306	Principles of Information Security	5	3	3	C
IT5406	Systems & Network Administration	5	3	3	C
IT5506	Mathematics for Computing II	5	3	3	O
EN6106	Emerging Topics in Information Technology	6	2	-	C
IT6206	Software Quality Assurance	6	3	3	C
IT6306	Mobile Application Development	6	4	4	C
IT6406	Network Security and Audit	6	3	3	C
IT6506	e-Business Technologies	6	3	3	O
	Total Number of Credits		**37**	**33**	

Table 4c: Level III courses

*IT5106 - Software Development Project is an 8 GPA Credit course and offered in both Level III Semester 5 and 6 with 4 Credits for each semester.

Select all Compulsory (C) and Optional (O) courses to complete 30 GPA credits.

EN courses are non-GPA. Therefore, the credit value of an EN course is not considered for GPA calculation.

LEVEL

III

4.2.3.1 COURSE DESCRIPTIONS

EN5106 — Fundamentals of Management & Entrepreneurship

This course aims to help students understand the basic concepts and theories of management and entrepreneurship and to know how these theories and concepts could be applied in different types of organizations in order to achieve their goals efficiently and effectively. This course covers topics of Introduction to Management; Planning; Organizing; Leading; Controlling; Introduction to Entrepreneurship; Identify and evaluate potential business opportunities; Developing an appropriate business model; Developing a business plan; and Entrepreneurial grow.

IT5206 — Professional Practice

The main objective of this course is to develop a sense of professional responsibility through exploring professional codes of ethics articulated by professional accrediting bodies. Students will explore a range of social, legal, ethical and business issues that IT professionals face in their careers. This course covers topics of Introduction to Professional Practice; Structure and Management of IT Organizations; Human Resource Issues; Software License and Contracts; Intellectual Property; Internet Issues; and Ethics: IT Developers' Perspective.

IT5306 — Principles of Information Security

This course focuses on the fundamentals of information system security that are used in protecting both the information present in computer storage as well as information traveling over computer networks. Information security is enabled through securing data, computers, and

networks. This course covers topics of Information Security Concepts; Hash Functions and MAC; Symmetric Key Encryption; Asymmetry Key (Public Key) Encryption; Key Distribution Protocols; Operating Systems Security; Database Security; Program Security; Electronic Payment Systems; and Digital Crime and Legal Background of Information Security. By the end of this course, students will be able to identify information security issues and provide suitable solutions.

IT5406   Systems & Network Administration

The main objective of this course is to develop systems and network administration skills such as planning, creating, building, and troubleshooting on GNU/Linux-based systems and services, ethical and professional practices, and technological awareness to meet software industry requirements. This course covers topics of Introduction to System & Network Administration; Installing an Operating System; Host Management; Network Administration; Automating System Administration; and Virtualization and Cloud Computing.

IT5506   Mathematics for Computing II

This course aims to cover mathematical concepts required to understand and successfully complete the other courses in the degree programme, and strengthen the mathematical foundation required in solving problems. This course covers topics of Theory of Matrices, Vector spaces and Linear Transformations; Linear Programming and Integer Programming; and Basic Statistics.

EN6106   Emerging Topics in Information Technology

This course provides an overview of some emerging Information Technology topics. This course covers topics of Microservices; Data Science with Python; Artificial Intelligence; Social Network Analysis; Digital Forensics; and Extended Reality.

IT6206   Software Quality Assurance

This course aims at delivering the fundamentals of software quality assurance and testing and their practical aspects. Students will learn how software testing and quality assurance tasks are performed in different stages of the software development life cycle. Further, the students will learn about how continuous integration and continuous delivery mechanisms are being used in software testing. This course covers topics of Introduction to Software Testing; Software Testing Process; Test Techniques and their Characteristics; Test Case Design; Levels of Testing; Software Testing Life cycle; Quality Control; Test Automation; XML Based Test Automation; Automated Testing Suites for Web Applications (e.g Selenium); Javabased Test Automation (e.g TestNG); Continuous Integration (CI) and Continuous Delivery (CD); Mobile Test Automation (e.g Appium); and Test Reporting.

IT6306   Mobile Application Development

This course aims to develop an understanding of contemporary mobile development platforms and the skills required to develop applications for mobile devices. The course explores a range of technical problems and solutions inherent in developing software applications for mobile devices including connectivity, security, and data storage. The course explains the key challenges in creating usable and effective interactive mobile applications and design techniques to address them. Also, develops an understanding of the unique features of contemporary mobile devices and how they can be used in interactive mobile applications. This course covers topics of Introduction to Mobile Applications; Comparison of Mobile Application Development Platforms; Designing for Mobile Applications; Native Application Development with Android; Android Architecture Components and Room Database; and Deployment and Monetization.

IT6406   Network Security and Audit

The main objective of this course is to develop network security and auditing skills such as explaining basic concepts behind network security protocols and services, network security applications and implementations, and conceptual and practical knowledge of discovering, reporting and solving network compliance/security issues. This course covers topics of Computer and Network Security Concepts; Transport Layer Security; User authentication and Network Access Control; Virtual Private Networks; Network Perimeter Security; Email security and Domain Name System Security; Wireless Network Security; Cloud Security; IT Infrastructure Auditing Concepts; and IT Infrastructure Auditing and Remediation.

IT6506   e-Business Technologies

This course aims to identify the concepts of eCommerce and eBusiness; describe the eCommerce and eBusiness infrastructure and trends; analyse different types of technologies and deployment methodologies; analyse real business cases with respect to their eBusiness strategies; follow eTransformation processes and methodologies; and integrate theoretical frameworks with business strategies. This course covers topics of Introduction to eBusiness and eCommerce; Evolution of eMarketplaces; eBusiness Applications & Success Stories (Case Studies from few industries); Development of eBusiness Strategies; eBusiness Models and Revenue Models; Digital Marketing Strategies; eBusiness Transformation; e-Supply Chain Management (eSCM); e-Customer Relationship Management (eCRM); and Entrepreneurial Opportunities in eBusiness.

Detailed Syllabus for each of the above courses are available at the: https://vle.bit.lk/

05

EXAMINATIONS

5.1 MEDIUM

Medium of Examinations is English. Any part of the answer script written in any other language will not be marked.

5.2 EXAMINATION DATES

Examinations will be held on Semester basis, twice within an Academic Year. The Examinations shall be conducted in every academic year at the end of every Semester; however the University reserves the right to conduct the Examinations at any time during a year.

5.3 APPLICATIONS TO SIT THE EXAMINATIONS

Applications for examinations will be entertained from prospective candidates who possess all the requisite qualifications via the BIT website. Refer examination criteria (see Section 5.4) for eligibility. Examination application forms should be completed online and system generated application and the payment voucher should be printed and submitted to the BIT office. Examination fee will be non-refundable and non-transferrable. Applicants should download and print their examination admission cards and bring them to the examination centre with attestation. Students are requested to refer the BIT website regularly for examination schedule updates and notices.

<u>Important</u>

Examination Application may be rejected on the following grounds:

- (i) Not possessing all the requisite qualifications for the examination concerned
- (ii) Not applying on prescribed online forms
- (iii) Not submitting the system generated application and payment voucher on or before the closing date of applications

(iv)   Invalid Registration

(v)   Non-payment of Registration and Examination fees

(vi)   Pending inquiries

(vii)   Incomplete or inaccurate application form

5.4 EXAMINATION CRITERIA

The Board of Examiners may test any candidate by means of written/ electronic/ oral/ practical examination or any other form of evaluation.

Each course (as set out in section 4 above) examination leading to the award of the Degree of Bachelor of Information Technology, carries a maximum mark of 100.

A candidate shall not re-sit for a course examination, for which he/she has already obtained a grade of "C" or above in a GPA course or a "PASS" in Enhancement course.

5.4.1 ONLINE ASSIGNMENT CRITERIA

1. **Online assignments of all Level I and Level II courses (Semester 1, 2,3 and 4)**

A candidate will have to obtain
- At least 40% from each assignment in a GPA course (i.e. assignment 1 **AND** assignment 2 of a particular GPA course) to successfully **PASS** the online assignment component of that course.
- At least 50% from each assignment in a non-GPA course (i.e. assignment 1 **AND** assignment 2 of the enhancement course) to successfully **PASS** the online assignment component of that course.

Successful completion of this online assignment component of each course (GPA or non-GPA) is a compulsory requirement to obtain the Diploma/Higher Diploma at the end of the academic year.

2. Enhancement courses (Semester 1, 2, 3, 5 and 6)

Please note that in order to pass the enhancement courses (a compulsory requirement to obtain the BIT degree), a candidate will need to pass the written examination paper.

5.4.2 LEVEL I EXAMINATION

Each candidate shall sit during his Level I study, number of courses (as specified in section 4 above), relating to semester 1 and semester 2 and be subjected to online assignments during his/ her Level I study.

Any candidate who obtained;

1. a minimum Grade Point Average (GPA) of 1.50;
2. a Grade Point of 2.00 or above in Courses totalling not less than 20 GPA Credits;
3. a "PASS" Grade for all Enhancement Courses; and,
4. has not obtained a Grade Point of less than 1.00 in any of the Courses (This includes any candidate who has obtained an "E" grade, Absent (AB) for the examination, or not applied/registered for the examination.)

at the Level I course examinations may proceed to and register for the Level II.

Note that enhancement courses are Non-GPA.

5.4.3 LEVEL II EXAMINATION

Each candidate shall sit during his Level II study, the number of courses (as specified in section 4 above), relating to semester 3 and semester 4 and be subjected to online assignments during his/ her Level II study.

Any candidate who obtained;

1. a minimum Grade Point Average (GPA) of 1.50;
2. a Grade Point of 2.00 or above in Courses totalling not less than 20 GPA Credits;
3. a "PASS" Grade for all Enhancement Courses; and,
4. has not obtained a Grade Point of less than 1.00 in any of the Courses (This includes any candidate who has obtained an "E" grade, Absent (AB) for the examination, or not applied/registered for the examination).

at the Level II course examinations may proceed to and register for Level III.

Note that enhancement courses are Non-GPA.

5.4.4 LEVEL III EXAMINATION

Each candidate shall sit for number of compulsory and optional courses (as specified in section 4 above), relating to semester 5 and semester 6 during his/ her Level III study.

5.4.5 LEVEL III PROJECT EVALUATION

A list of candidates who have submitted the Level III project dissertation on or before the defined deadline and whose dissertation satisfied the minimum requirements will be published as the eligible candidates. The project evaluation for the eligible candidates will be done in two stages. In the first stage, the students should appear for the viva and code evaluation and in the second stage students should appear for the dissertation evaluation. Exact evaluation dates for each candidate will be published in the BIT website and the project VLE before the examination dates.

PROJECT PROCESS

The software development project is by far the most important single piece of work in the BIT degree programme which should be conducted individually by each student. The students will get 8 credits for this work. It provides the opportunity for a candidate to demonstrate independence and originality, to plan and organize a large project over a long period, and to put into practice some of the techniques that have been taught throughout the course. The Project also aims to assess a candidate's ability to communicate his ideas and work. Whatever your level of academic achievement is so far, you can show your individuality and inspiration in this project. It should be the most satisfying piece of work in your degree. It is equivalent to three courses in the BIT degree programme and is an extended piece of individual work, occupying a candidate's time from the end of the second year through to the end of the third year covering over 300 hours of work.

A candidate will select a supervisor and a project. A project is selected from a workplace or an organization. Candidate may also select a topic on his own to address an existing problem in an organization.

However each project should have a client appointed from top-level management of the organization. Candidate should gather user requirements and develop a prototype and demonstrate that the requirements are met through the system. Candidate will have regular meetings with the supervisor to discuss project work and produce a formal dissertation (report) in a structured way along the suggested guidelines. It should demonstrate that the relevant work has been carried out under proper supervision. Also, candidate should get the system evaluated by a sample group of users and obtain a client certificate to prove that candidate has met the user requirements and thereby successfully completed the project.

5.4.6 AWARDING OF DEGREE

You are eligible to get the BIT Degree, if you have;

1. a minimum of 90 GPA Credits with at least 30 GPA Credits from each of the three Levels: Level I, Level II and Level III
2. a minimum Overall GPA of 2.00 in all Levels
3. a minimum of 20 credits of "C" for GPA courses AND "PASS" grade for all Enhancement course in each Level.
4. at least a "C" grade for Software Development Project in Level III.
5. a "PASS" grade for all Enhancement course in each Level.
6. no grade below "D" grade in any course in each Level

5.5 GRADING SYSTEM AND GRADE POINT AVERAGE

The Range of Marks and the corresponding Grades and Grade Point Values (GPV) of the Academic Courses and the Project is given below.

Range of Marks	Grade	Grade Point Values (GPV)
85-100	A+	4.00
70-84	A	4.00
65-69	A-	3.70
60-64	B+	3.30
55-59	B	3.00
50-54	B-	2.70
45-49	C+	2.30
40-44	C	2.00
35-39	C-	1.70
30-34	D+	1.30
25-29	D	1.00
00-24	E	0.00

The Grade Point Average (GPA) of a candidate shall be calculated using the following equation

$$GPA = \frac{\sum(GPV \text{ of } CC*No. \text{ of credits of } CC) + \sum(GPV \text{ of } O*No. \text{ of credits of } O)}{\text{Total number of Credits for the program}}$$

Where "C" stands for Compulsory Course and "O" stands for required Optional Course. When calculating the GPA, additional optional courses taken are disregarded. The GPA is rounded to the second decimal place.

The Enhancement Courses shall be graded in terms of the following scheme.

Grading Scheme for Enhancement Courses

Courses Range of Marks	Grade
50 - 100	PASS
00 - 49	FAIL

If the student is Absent (AB) for the Enhancement course or not applied / or not registered for the Enhancement course that will be considered as incomplete.

The Enhancement Courses shall not contribute to the calculation of GPA.

5.6 EXAMINATION ADMISSION CARDS

Before a minimum of one week prior to the commencement of the examination, the admission cards for the examination will be issued for all the eligible candidates through the BIT website. In the event of a candidate having any issue related to the admission he should inform the EDC of UCSC immediately. Failing that candidate will not be allowed to sit the examinations.

5.7 OTHER REQUIREMENTS

Those candidates who are referred or re-referred must of necessity obtain a pass in the relevant of such course examination in accordance with examination criteria.

A candidate can re-appear for any course examination to obtain a pass in the course until he/she exhausts the number of attempts allowed for

each level. However, a student shall not re-sit a course examination for which he/she has obtained a grade of "C" or above.

5.8 EXAMINATION PROCEDURE

Rules to be followed in Examination

1. Students have to be **present** at the Examination Hall at least 30 minutes before starting the paper, but can't enter the hall until Supervisor gives permission.

2. Once admitted to the examination hall students are not allowed to leave the examination hall till the examination is over.

3. After entering the hall, students should go to the **seat** assigned to them and cannot change it without Supervisor permission.

4. Students must have their BIT Identity Card and Admission Card for each paper. If students fail to bring their BIT Identity Card, they have to sign a declaration form provided by the invigilator. If a student loses BIT Identity Card they can obtain a new BIT Identity Card from the External Degrees Centre (EDC). Relevant fees in connection with issuing a new BIT Identity Card is applicable.

5. **Admission Cards** are signed in front of the Supervisor/ Invigilator when a student sits for a paper.

6. Students have to bring their own pens, ink or any other approved equipment and **stationery**.

7. **Examination stationary** (i.e. Writing papers and MCQ answer sheets) will be supplied and only these papers can be used at the Examination. Answer books supplied to the students can not be torn or damaged. Only one MCQ Answer Sheet will be provided. All materials supplied, whether used or unused, have to be left behind and cannot be removed from the examination halls.

8. Students are prohibited to have any notes, formulae or any other **unauthorized material** with them during the examination. Books, handbags, electronic and communication devices etc. which students have brought with him/her should be kept at a place shown by the Supervisor/Invigilator.

9. Every student has to enter their **Index Number** on the answer book and on every extra sheet. A student who writes another students index number on their answer sheet, can be considered as having attempted to cheat. The Supervisor/Invigilator has the authority to check the answer scripts of the student. An answer script that bears no Index Number or an Index Number which cannot be identified, might be rejected. Students can't write their names on the answer book.

10. Students are under the **authority** of the Supervisor and have to carry out their and invigilators instructions throughout the exam.

11. Absolute **silence** has to be maintained in the Examination hall and around it. A student cannot talk or to have any dealings with anyone other than the Supervisor/Invigilator. If a student needs to draw the attention of Supervisor/Invigilator they can raise their hand. A student can be excluded from the examination hall for causing disturbance.

12. After starting the exam, students cannot **leave** Examination hall even temporarily. In case of an emergency, the Supervisor/Invigilator will grant them permission under constant surveillance.

13. Students have to **stop writing** immediately when Supervisor/Invigilator orders. If this instruction is not followed the Supervisor/Invigilator has the authority to make a statement on the answer book.

14. All calculations and **rough work** will be done only on given paper. Such work should not be done on admission cards, timetables, question papers or on any other paper. Any student who disregards these instructions can be considered as having written notes with the intention of copying.

15. Any answer or part of the answer which is not to be considered for the purpose of assessment, will have to be neatly crossed out. If the same question has been attempted in more than one place the answers that are to be disregarded has to be neatly crossed out.

16. Every student has to hand over the **answer scripts** personally to the Supervisor/Invigilator or remain in their seat until it is collected. They cannot hand over their answer scripts to an attendant, a minor employee or another student.

17. After **handing** over the paper, students cannot have it back.

18. Students cannot **remove** answer scripts from the Examination hall.

19. Students cannot **copy** from any material or from the answer scripts of another student. Nor can they help another student or get help from another student.

20. Impersonating students at the examination is not allowed.

21. The Supervisor/Invigilator can request a student to make a statement in writing due to an incident during the examination, and such statement will have to be signed by the student. Students cannot refuse to make such a statement or to sign it.

5.9 EXAMINATION OFFENCES AND PUNISHMENTS

Students are strongly advised against committing plagiarism in the submission of assignments, assessments and thesis reports. In the case of other written examinations, the possession of unauthorized material is considered as an offence punishable under the University of Colombo rules on conduct of examinations.

1. Examination offences can be classified as follows:
   - (a) Possession of unauthorized documents or removal of examination stationery.
   - (b) Disorderly conduct.
   - (c) Obtaining or attempting to obtain improper assistance or cheating or attempting to cheat.
   - (d) Impersonation.
   - (e) Aiding and abetting the commission of any of these offences.
   - (f) Violation of any of the requirements or conditions stipulated in Part I.

2. There shall be an Examination Disciplinary Committee to inquire into and make recommendations (including punishments) regarding examination offences.

3. In all cases of examination offences, the Supervisor will take action and forward his/ her report to the Director/UCSC.

4. If students possess unauthorized material at an examination hall, it will be presumed that they have used it until the contrary is proved by them.

5. In cases of disorderly conduct the Supervisor will in the first instance warn the student, and if the student persists in disorderly conduct, the Supervisor may exclude the student from the examination hall and issue him/her a letter cancelling their candidature from the examination.

6. In all other cases of examination offences, the Supervisor will take over the unauthorized documents and will obtain a statement from the student and write his report on the matter.

7. A student who is guilty of an examination offence is liable to following punishments.
    (a) Removal of their name from the pass list.
    (b) Cancellation of their candidature from whole or part of the examination.
    (c) Suspension from any University examination.
    (d) Suspension from the University for a period.

8. Any student found helping to commit an examination offence will receive the same punishment as the offender.

9. Further, the student will not be eligible for award of a 'Class'. The examination offence decisions are subjected to the decision of the University of Colombo Examination Committee.

10. Any student found helping to commit an examination offence will receive the same punishment as the offender.

11. If the examination board decides that the submitted individual project has been detected in some kind of plagiarism, the examination offence punishments can be applied at any time.
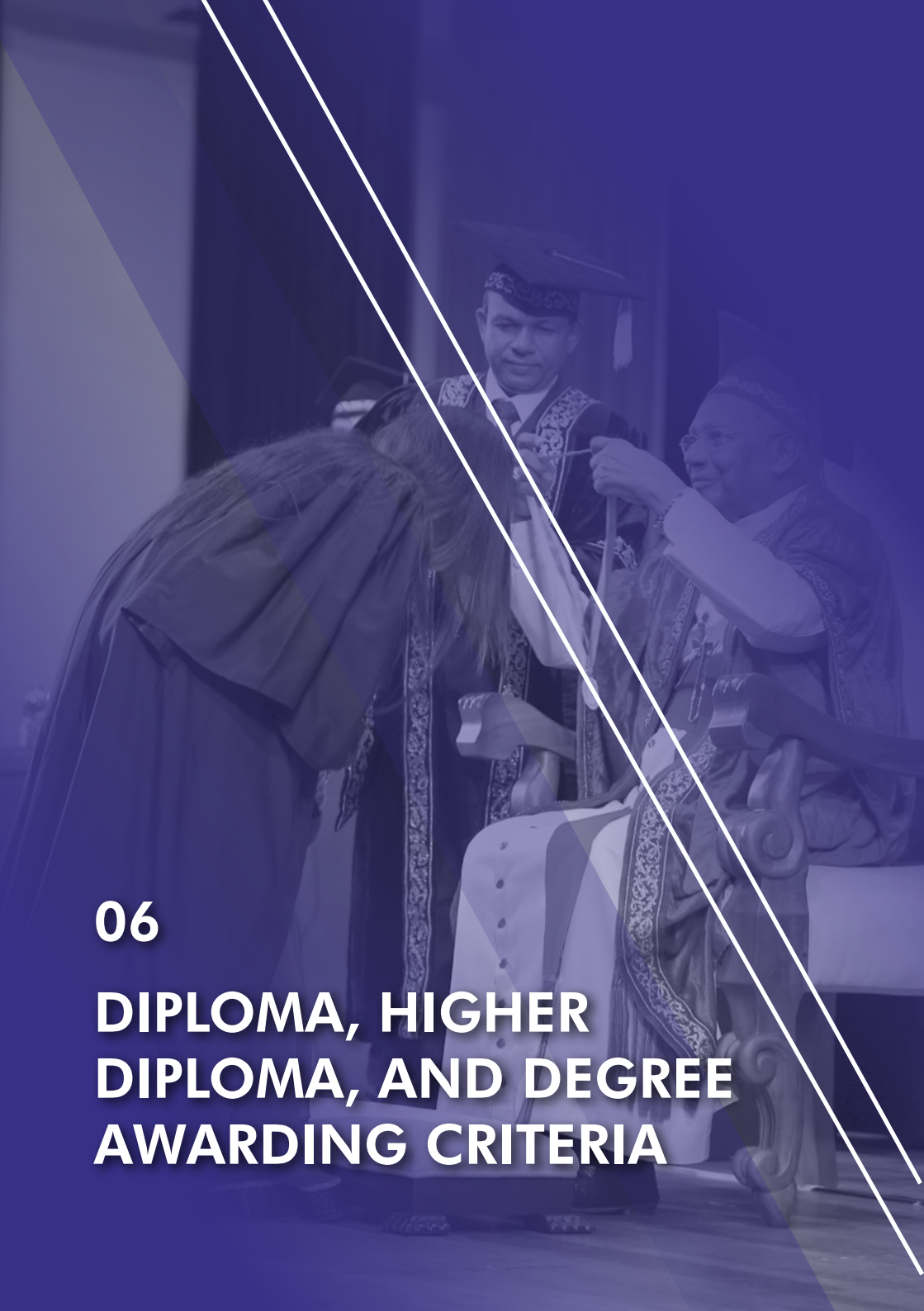
06

DIPLOMA, HIGHER DIPLOMA, AND DEGREE AWARDING CRITERIA

6.1 AWARD OF DIPLOMAS

A candidate may be awarded a Diploma or Higher Diploma, as the case may be, provided he/she satisfies the conditions prescribed below.

6.1.1 DIPLOMA IN INFORMATION TECHNOLOGY (DIT)

A candidate may be awarded the Diploma in Information Technology (DIT) if he/she has:

- obtained a "PASS" Grade for all the Enhancement courses in Level I
- obtained at least a "C" Grade for all GPA courses in Level I
- Passed all online assignments of all courses (GPA and non-GPA) in Level I

6.1.2 HIGHER DIPLOMA IN INFORMATION TECHNOLOGY (HDIT)

A candidate may be awarded the Higher Diploma in Information Technology (HDIT) if he/she has:

- obtained a "PASS" Grade for all the Enhancement courses in Level II
- obtained at least a "C" Grade for all GPA courses in Level II
- Passed all online assignments of all courses (GPA and non-GPA) in Level II
- obtained the Diploma in Information Technology (DIT) from the University of Colombo

6.2 CRITERIA FOR A PASS

A candidate shall be deemed to have passed the Degree of Bachelor of Information Technology Examinations if he/she has

(a) completed a minimum of 90 GPA Credits with at least 30 GPA Credits from each of Level I, Level II and Level III;

(b) has obtained a Cumulative Grade Point Average of not less than 2.00 in all Levels;

(c) has obtained a Grade Point of not less than 2.00 for GPA Courses aggregating to at least 20 GPA Credits each in Level I, Level II and Level III;

(d) has secured a Grade Point of not less than 2.00 for the Software Development Project in Level III;

(e) has not obtained a Grade Point of less than 1.00 for any of the Courses; and,

(f) has obtained a Pass Grade for each Enhancement Course in each Level identified in the Regulations.

If a candidate, who fails to obtain a pass in the Degree of Bachelor of Information Technology Examination as specified in section 6.1 above, may be allowed to re-sit any course examination subject to conditions specified elsewhere in By-Laws.

If the candidate does not pass at the Software Development Project in Level III, he/she shall be required to repeat the project next year.

A candidate may withdraw any course for which he/she obtained a grade prior to C, before releasing his/her formal degree results by written request to the Coordinator EDC. Such a course would not appear in his/ her transcript.

Each course examination and the project shall be graded according to a scheme and the details of that grading system will be available on the BIT website.

6.3 AWARD OF CLASSES

In the case of a candidate who passes a repeat subject of any course examination, the percentage score to be taken into consideration in determining the award of class shall be limited to a 'C' grade for a course examination unless the Senate decides otherwise.

A candidate who passes all the Examinations leading to the Degree of Bachelor of Information Technology <u>within six consecutive academic years from the first date of registration</u> may be placed in the First Class, Second Class (Upper Division) or Second Class (Lower Division), as the case may be, on the results of the Examinations taken together.

6.3.1 FIRST CLASS

Subject to the criteria mentioned above in Section 6.3, a candidate is eligible to be placed in the First Class if he/she has passed the Degree of Bachelor of Information Technology as set out in Section 6.1 and has:

(i) obtained a minimum overall Class GPA of 3.70; **AND**
(ii) a minimum of a "A" grade for the Software Development Project.

6.3.2 SECOND CLASS (UPPER DIVISION)

Subject to the criteria mentioned above in Section 6.3, a candidate is eligible to be placed in the Second Class (Upper Division) if he/ she has passed the Degree of Bachelor of Information Technology as set out in Section 6.1 and has:

(i)   obtained a minimum overall Class GPA of 3.30; **AND**

(ii) a minimum of a "B" grade for the Software Development Project.

6.3.3 SECOND CLASS (LOWER DIVISION)

Subject to the criteria mentioned above in Section 6.3, a candidate is eligible to be placed in the Second Class (Lower Division) if he/ she has passed the Degree of Bachelor of Information Technology as set out in Section 6.1 and has:

(i)   obtaining a minimum overall Class GPA of 3.00; **AND**

(ii) a minimum of a "B" grade for the Software Development Project.
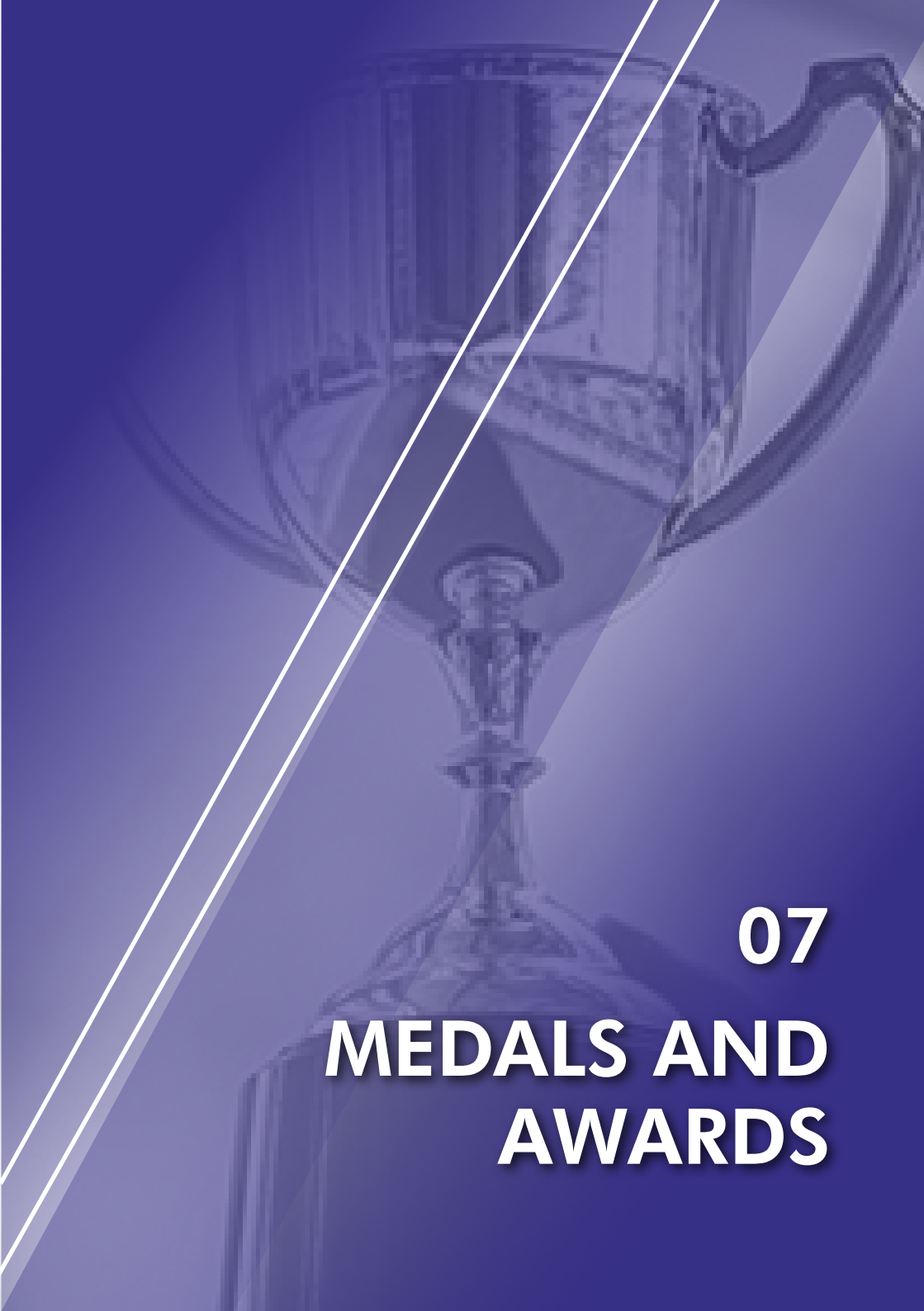
07

MEDALS AND AWARDS

7.1 OVERVIEW

The candidates have to apply to obtain examination transcripts and certificates. All certificates are awarded once a year during the respective awards ceremony. The candidates may apply for transcripts during anytime of the year using the online form paying transcript and postal fees.

7.2 RECORDS OF EXAMINATIONS AND TRANSCRIPTS

Candidates who have not obtained DIT, HDIT, or BIT qualifications can request for ONLY a Records of Examinations which gives details of the grades, credits, and the year which the examination of each course has been attempted, provided that, he/she makes an application for a Records of Examinations.

The University shall publish the names of candidates who are eligible to be awarded the Degree of Bachelor of Information Technology. Each candidate who qualifies for the DIT, HDIT, or BIT will be given a transcript containing information on his or her grades, GPV, and GPA, as well as the final result, including any classes, if any, if he or she applies for one.

Applications for Records of Examinations and/or Transcript must be made using the online system. The Records of Examinations and/or Transcript will be either posted or can be collected from the Examination Branch. Within two weeks, you will receive your Records of Examinations and/or Transcript.

7.3 DEGREE

Degree certificates will be issued to graduates after the approval of the Senate of the University of Colombo, few months after the convocation ceremony.

7.4 DIPLOMAS AND HIGHER DIPLOMAS

A candidate who has obtained a PASS for each Enhancement course AND a minimum C grade for each GPA course AND passed all the online assignment as specified in section 4 in Level I shall be awarded a Diploma in Information Technology.

A candidate who has obtained a PASS for each Enhancement course AND a minimum C grade for each GPA course AND passed all the online assignment as specified in section 4 in Level II and has obtained the Diploma in Information Technology shall be awarded a Higher Diploma in Information Technology.

7.5 MEDALS & AWARDS

7.5.1 MEDALS

Prof. V.K. Samaranayake Memorial Medal for the best performance in the Bachelor of Information Technology (External) Degree

1. The selection would be made by the examinations board that determines the award of the degree.
2. The award will be made to the student who graduates at the first attempt with the highest overall class GPA within three consecutive years from the date of first registration, among those who obtain a first class. If there is a tie, the award will be given jointly.

3. If there is no suitable candidate for the award, it will not be awarded in the respective convocation.
4. The award will consist of a gold medal and cash prize.
5. The award is named "Prof. V. K. Samaranayake Memorial Gold Medal for the best performance in the BIT (External) degree".

The selection would be made by the examinations board that determines the award of the degree and it will be awarded at the BIT convocation.

Prof. G. N. Wikramanayake Memorial Medal for the best performance in Software Development Project

1. This will be awarded at the BIT convocation to the student who graduated at the first attempt with the highest mark for the Software Development Project. If there is a tie, the award will be given jointly.

The selection would be made by the examinations board that determines the award of the degree and it will be awarded at the BIT convocation.

Mr. M.J.P.U. Samanthilake Memorial Medal for best performance in the Level III

Mr. M.J.P.U. Samanthilake Memorial Medal will be awarded to the candidate,

1. who has obtained the highest class GPA at Level III. If there is a tie, the award will be given jointly.

The selection would be made by the examinations board that determines the award of the degree and it will be awarded at the BIT convocation.

7.5.2 AWARDS

Best e-Learner award for Semester 1

1. This award will be made to the candidate(s) who obtain the Diploma at the first attempt and their performance at the VLE assignments and the active participation in the VLE forum discussions in the first semester.
2. The award will consist of a certificate and a cash prize.
3. The selection will be made by the examinations board that determines the Diploma awardees.
4. This award will be presented at the Diploma Award Ceremony.

Best e-Learner award for Semester 2

1. This award will be made to the candidate(s) who obtain the Diploma at the first attempt and their performance at the VLE assignments and the active participation in the VLE forum discussions in the second semester.
2. The award will consist of a certificate and a cash prize.
3. The selection will be made by the examinations board that determines the Diploma awardees.
4. This award will be presented at the Diploma Award Ceremony.

Best e-Learner award for Semester 3

1. This award will be made to the candidate(s) who obtain the Higher Diploma at the first attempt and their performance at the VLE assignments and the active participation in the VLE forum discussions in the third semester.
2. The award will consist of a certificate and a cash prize.

3. The selection will be made by the examinations board that determines the Higher Diploma awardees.
4. This award will be presented at the Higher Diploma Award Ceremony.

Best e-Learner award for Semester 4

1. This award will be made to the candidate(s) who obtain the Higher Diploma at the first attempt and their performance at the VLE assignments and the active participation in the VLE forum discussions in the fourth semester.
2. The award will consist of a certificate and a cash prize.
3. The selection will be made by the examinations board that determines the Higher Diploma awardees.
4. This award will be presented at the Higher Diploma Award Ceremony.

08
FEES & PAYMENTS

8.1 PROGRAM FEES (LOCAL)

Program fees for Sri Lankan Citizens (in Sri Lankan Rs.) are given in the following table 1. This will only be applicable for Sri Lankan Students currently residing in Sri Lanka.

	Year 1 (LKR)	Year 2 (LKR)	Year 3 (LKR)	TOTAL (LKR)
Application Processing Fee (when applying)	1,800.00	-	-	1,800.00
Annual Registration/ Renewal Fee	4,000.00	4,800.00	5,500.00	14,300.00
Course examination Fee (Each course)	1,750.00	2,200.00	2,750.00	-
Year Examinations (minimum)	17,500.00	22,000.00	24,750.00	64,250.00
Project Examination Fee (Proposal & Dissertation submission)	-	-	12,500.00	12,500.00
TOTAL (minimum)	23,300.00	26,800.00	42,750.00	92,850.00

Table 1: Program fees for Sri Lankan Citizens

Fees in respect of repeat course(s)/project examination(s) are same as above.

8.2 PROGRAM FEES (FOREIGN)

Program fees for Foreign Citizens are given in Table 2 and Table 3. Applications of the foreign students should be sent with the recommendation of the relevant foreign missions in Sri Lanka.

This will be applicable to all the students who are residing outside of Sri Lanka.

Sri Lankan Students who are residing overseas and the students whose citizenship is from SAARC countries are entitled for a 50% rebate.

	Year 1 (€/$)	Year 2 (€/$)	Year 3 (€/$)	TOTAL (€/$)
Application Processing Fee (when applying)	50			50
Annual Registration/Renewal Fee	70	80	90	240
Course examination Fee conducted in Sri Lanka (Each course)	40	50	60	-
Year Examinations conducted in Sri Lanka (minimum)	400	500	600	1500
Project Examination Fee (Proposal & Dissertation submission)			300	300
TOTAL for the course	520	580	990	2090

Table 2: Program fees for foreign students for exams conducted in Sri Lanka

(Payments are in Euros/US Dollars for exams conducted in Sri Lanka)

	Year 1 (€/$)	Year 2 (€/$)	Year 3 (€/$)	TOTAL (€/$)
Application Processing Fee (when applying)	50			50
Annual Registration/Renewal Fee	70	80	90	240
Course examination Fee conducted online	80	100	120	-
Year Examinations conducted online (minimum)	800	1000	1200	3000
Project Examination Fee (Proposal & Dissertation submission)			600	600
TOTAL for the course	920	1080	1890	3890

Table 3: Program fees for foreign students for exams conducted online

(Payments are in Euros/US Dollars for exams conducted online)

NB: Examinations will be conducted from 9 AM to 5 PM in Sri Lankan Time (+5.30 GMT)

8.3 MISCELLANEOUS FEES

Miscellaneous fees for Sri Lankan Citizens and Foreign Citizens are given in Table 4.

Description	Fee (Rs) – For Sri Lankans	Fee (US $) – For Foreign Citizens
Fee for letter issuing to certify the current registration status per letter.	1,000	15
Additional copy	1,000	15
Fee for Academic Transcript with Grades / Records of Examinations	2,000	30
Fee for the Academic Transcript with Grades / Records of Examinations – Additional copy	2,000	25
Fee for the Academic Transcript with Grades & marks.	3,000	35
Fee for the Academic Transcript with Grades & marks – Additional Copy (sent only to Foreign Institutions named by the student)	3,000	30
To certify an academic certificate as a true copy	200	15
To send the educational certificate directly to higher educational institution or any other organizations(such as WES)	2,000	25
Postage Fee	125	20
Certificate fee for the Diploma in Information Technology	6,500	40
Certificate fee for the Higher Diploma in Information Technology.	8,250	45
Certificate fee for Bachelor in Information Technology	9,500	50
Resubmission of Final Report (Major Corrections)	6,000	50
Re- Project Evaluation (Medicals for Viva)	8,000	50
Re – Project Evaluation (Medicals for Dissertation)	5,500	40
Issuing of Academic Reference Letter	2,000	25
Surcharge Fee (Late Submissions/Payments)	Double the Relevant fee	Double the Relevant fee

Table 4. Miscellaneous Fees

MISCELLANEOUS FEES FOR SRI LANKAN CITIZENS

NOTE

- All payments can be made to any People's Bank branch on prescribed Cash-Paying-in-Slip that can be downloaded from the BIT website (Please use all 4 copies of the voucher).
- Cash / Money / Postal Orders will not be accepted.
- All the above fees are non-refundable and are subject to revision.
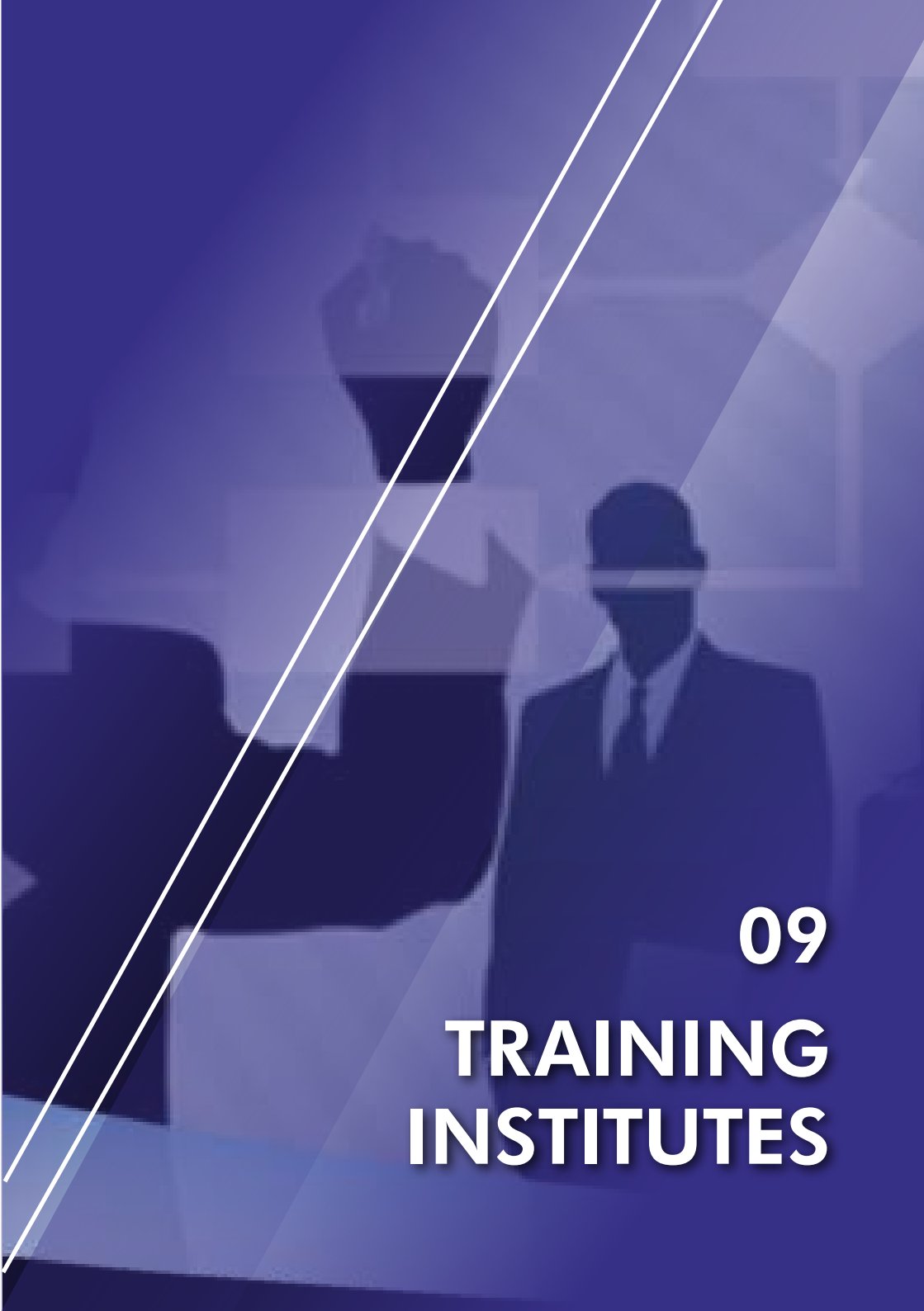
09

TRAINING INSTITUTES

9.1 INTRODUCTION

Since BIT is an external degree programme, UCSC does not undertake any teaching. UCSC provides teaching and learning resources such as detailed syllabi with a list of recommended textbooks for each course, model and past question papers, interactive learning materials and self-evaluating quizzes through the Virtual Learning Environment (VLE) [https://vle.bit.lk/]. All registered students are given access to the VLE while promoting self-learning according to the BIT curriculum. This online learning environment of BIT might not be adequate for some students depending on their background and experience. Hence, students could decide to follow face to face teaching courses conducted by private teaching institutes according to their wish.

Private teaching institutes can also make use of the VLE resources to conduct teaching for the BIT degree programme. Currently, there is no restriction for any institute or individual to start BIT teaching institutes since UCSC does not undertake any responsibility for their activities. However, depending on the progression of a private institution, they can attain the status of a "Recognized BIT Teaching Institute" and then, proceed to become an "Accredited Institute of BIT Teaching".

To become a "Recognized BIT Teaching Institute", a teaching institute need to go through three (3) stages.

When a teaching institute commences teaching BIT courses, they need to register with the External Degrees Center (EDC) of the UCSC. At this stage, they are considered as an "Applied Institute".

When a teaching institute informs the UCSC that they conduct courses for the BIT degree programme along with a list of their students who have registered for the BIT degree, UCSC verifies the records and

if acceptable, those teaching institutes will be given the VLE access as readers (not as students or teachers) to see the learning content including interactive learning activities. At this stage, these teaching institutes are considered as an "Application Verified Institute".

When BIT students apply for examinations, students are given an option to disclose the teaching institutes which they have followed the courses. If students of those teaching institutes, completed the BIT examinations successfully, then, UCSC publishes those institutes statistics on the BIT website, with the consent of the respective teaching institute. Only those teaching institutes that have satisfactory progress are offered the status of "Recognized BIT Teaching Institute" and their institute details are included in the BIT handbook. As a Recognized BIT Teaching Institute, they are given access to the BIT VLE as readers (not as students or teachers). They are also eligible to use the BIT logo with the accompanying statement of "UCSC Recognized Teaching Institute" for their promotional materials.

In addition to getting their statistics published on the BIT website and BIT handbook, these institutes cannot claim themselves as accredited BIT teaching institutes of the UCSC. However, having accreditation from the UCSC provides added benefits to a teaching institute to attract students to follow the BIT degree programme at their institute, and obtain a higher recognition which will provide external benefits such as funds, loans, etc, which are beyond the purview of the UCSC. Also, this provides ease of mind for students to follow the courses at a UCSC recognized teaching institute.

The status of "Accredited Institute of BIT Teaching" is offered only to a limited number of UCSC recognized teaching institutes after a rigorous evaluation process conducted by the UCSC according to defined criteria. The teaching institutes who are successful in the evaluation will

be considered as an accredited institute of BIT teaching for three (3) years. To maintain the highest quality of standards, the teaching institute needs to apply for the renewal of their status before the completion of three (3) year period. The names of the accredited teaching institutes will be published in the BIT website and the BIT VLE under the title of "Accredited Institute of BIT Teaching". Only those teaching institutes are eligible to use the BIT logo with the accompanying statement of "UCSC Accredited Teaching Institute" for their promotional materials.

9.2 TRAINING INSTITUTES

Table 9a presents the recognized BIT teaching institutes for the year 2020.

DISTRICT	INSTITUTE NAME AND ADDRESS	CONTACT DETAILS
COLOMBO	Asian Institute of Business & Technology (Private) Limited	0117777234/ 0770216161 varuna.w@aibt.education
	Aurora Computer Studies	0115690290/ 0719842030 info@auroracs.lk
	ESOFT Metro Campus-Colombo	0117572572/ 0762315571 info@esoft.lk
	CFPS Academy of Business and Technology	0114325484/ 0711279999 Jeewanthi@horizoncampus.edu.lk
	MATRIX Institute of Information Technology (Pvt) Ltd	0112553331/ 0714317927 vpintoj@gmail.com
	World Wide Wisdom Campus (PVT) LTD (Colombo Branch)	0112684819/ 0777803434 colombo@w3campus.lk
	Earth Uni College - Colombo	0112687688/ 0112684838/ 0114349393/ 0776233233 admin@earth.lk
	OpenArc School of Business and Technology Ltd	0112515050/ 0704500777 vijith@openarc.lk
	eLearning.lk PVT LTD.	0113613500/ 0756700700/ 0779101993 info@elearning.lk

GALLE	Earth Uni College - Galle	0112687688/ 0912228569/ 0914944488/ 0776233233 admin@earth.lk
	Southern Engineering Technology Campus	0912228191/ 0775446191 info@setcampus.lk

|		
GAMPAHA	World Wide Wisdom Campus (PVT) LTD (Gampha Branch)	0332060410/ 0777803434 manjula@w3campus.lk
	ESOFT Metro Campus - Gampaha	0337572572/ 0773785301 info.gampaha@esoft.lk
	Earth Uni College - Gampaha	0112687688/ 0332225865/ 0334942626/ 0776233233 admin@earth.lk

JAFFNA	College of ICT	0706618015/ 0718618015 cictjaffna@gmail.com
	MCS IT CAMPUS	0212226373/ 0777729127/ 0212226373 mcsjaffna@gmail.com

KANDY	Asian Institute of Business & Technology (Pvt) Ltd - Kandy Branch	0812224442/ 0771200102 kanchana.p@aibt.education
	ESOFT Metro Campus - Kandy	0817572572/ 0713463483 anuradha_kan@esoft.lk

MATARA	Asian Institute of Business & Technology (Pvt) Ltd - Matara Branch	0412231737/ 0770453084 shanuka.d@aibt.education
	ESOFT Metro Campus - Matara	0412233550/ 0773099304 gagana.w@esoft.lk
	Earth Uni College - Matara	0112687688/ 0412230561/ 0412230569/ 0772307929 admin@earth.lk

PUTTALAM	Hallam City Campus (Private) Limited	0322265744/ 0717640411 mafaz@hallamcitycampus.com

Table 9a: Recognized BIT teaching institutes for the year 2021
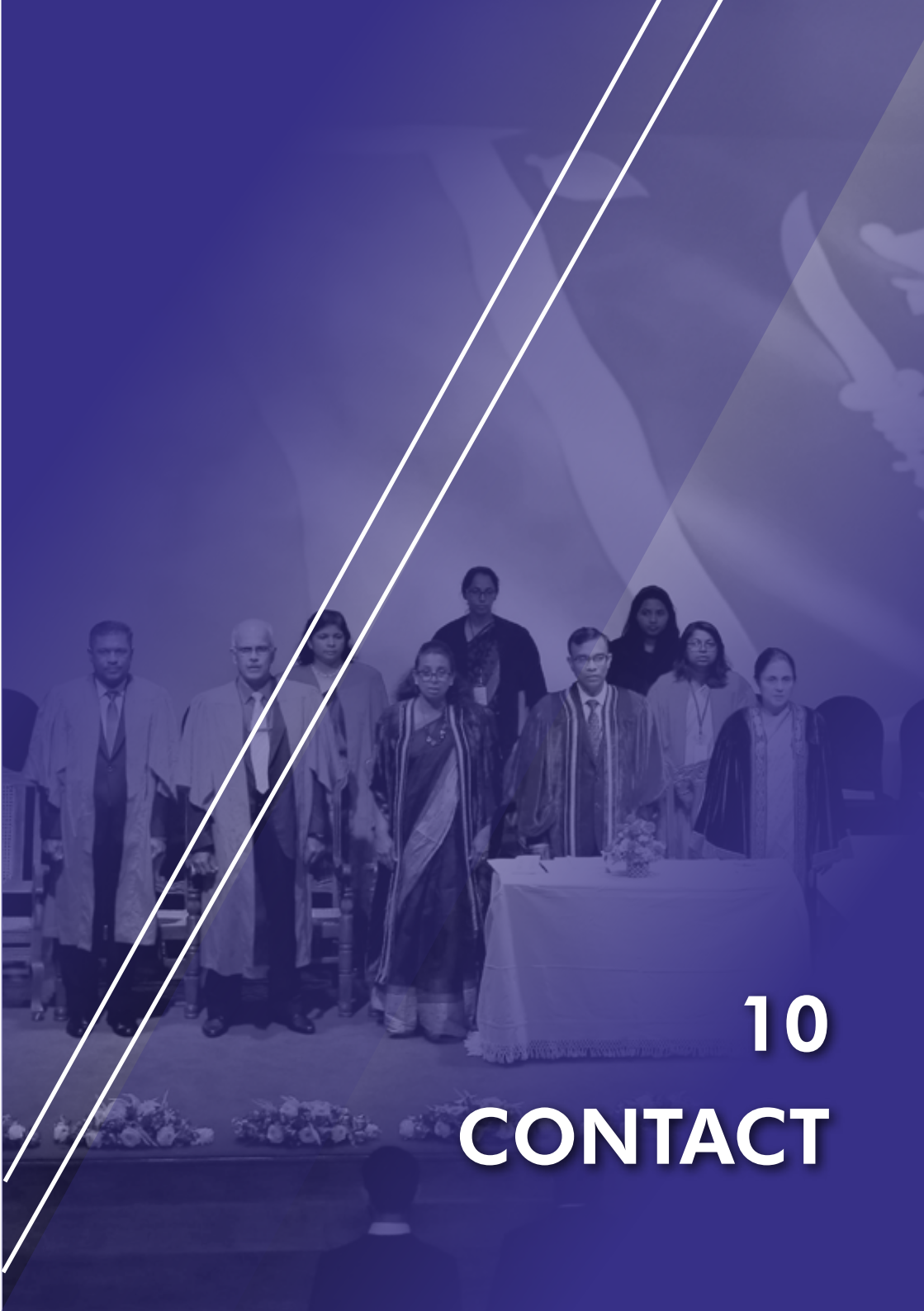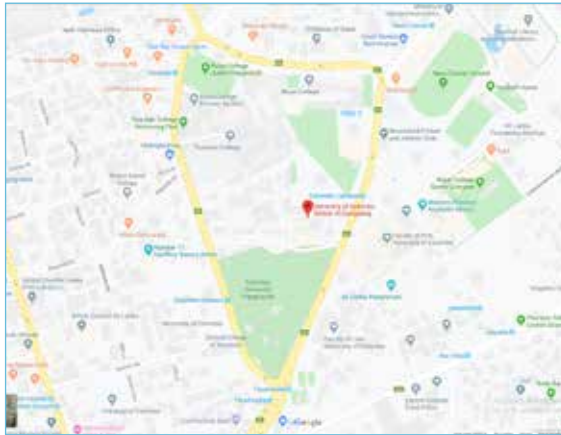
10
CONTACT

10.1 EXTERNAL DEGREES CENTRE

External Degrees Centre (EDC) is located at University of Colombo School of Computing UCSC Building Complex, 35, Reid Avenue, Colombo 7.

Refer Figure 10a for the location of the BIT office.

Further to the currently used contact numbers, following numbers have been updated for the communication purposes of the students.

Contact No	Authorized personnel	Remarks
0716393802	EDC Coordinator	**Calls**: during office hours (8.30 am- 5.00pm) **After hours**: WhatsApp enabled
0716393805	EDC Administration	**Calls**: During office hours (8.30 am- 5.00pm) **After hours**: WhatsApp enabled
0716393806	EDC office	**Calls**: Only during office hours (8.30 am- 5.00pm)

However, the official requests should be made for the relevant personnel using the relevant email address.

Please be kind enough to use these communication channels strictly for official purposes.

Postal Address	Assistant Registrar, External Degrees Centre, University of Colombo School of Computing, No. 35, Reid Avenue, Colombo 00700. Sri Lanka
Tel	+94 -112581245/ 6/ 7 +94 -114720511/12/13 +94 - 716393805/ 06/ 02 Refer Section 10.3 before making a telephone call.
Fax	+94 -112587239
BIT Web Site	http://www.bit.ucsc.cmb.ac.lk http://www.bit.lk
UCSC Web Site	https://ucsc.cmb.ac.lk
VLE Web Address	https://vle.bit.lk

10.2 STAFF

Following staff members are directly connected with the BIT programme. However, you may directly communicate only with those listed with email and it should be for appropriate purpose.

Director, University of Colombo School of Computing

Dr. D A S Atukorale
Email: director@ucsc.cmb.ac.lk

Head, External & Extension Pogrammes

Prof. M G N A S Fernando
Email: eep@ucsc.cmb.ac.lk

Academic Coordinator of BIT

Dr. (Ms.) K H E L W Hettiarachchi
Email: acc@ucsc.cmb.ac.lk

Coordinator, External Degrees Centre

Mr. W V Welgama
Email: edc@ucsc.cmb.ac.lk

Project Coordinator of BIT

Dr. H K T C Halloluwa
Email: bitpro@ucsc.cmb.ac.lk

Coordinator, e-Learning Centre/ FIT

Dr. M I E Wickramasinghe
Email: elc@ucsc.cmb.ac.lk

Assistant Registrar, External Degrees Centre

Ms. W M N K Weerasooriya
Email: aredc@ucsc.cmb.ac.lk

10.3 INSTRUCTIONS FOR REQUESTING BIT DEGREE RELATED INFORMATION

When requesting information regarding the DIT, HDIT and BIT degree related matters, please make sure to adhere to the following guidelines.

- Each email should consist of the following information.
  - Name of the Student
  - Index No
  - Registration No
  - NIC No.
  - Inquiry
  - Student Mobile Number

- **Contact only the relevant phone number for your query/ problem.**

Phone numbers that should be contacted with respect to relevant matters are given below.

Registration Related Matters	+94-716393805
Exam application Matters	+94-716393806
Project Related Matters	+94-716393802
Academic Transcript and Status Letters	+94 -11- 2581245/ 6/ 7 Ext: 8997
BIT related academic counselling	+94 - 716393802
Any other administrative matters	+94 - 716393805
External Degrees Centre	+94 -11- 4720511/12/13
All academic matters	Only via email - acc@ucsc.cmb.ac.lk
Online payment related issues	Only via email - opi@ucsc.cmb.ac.lk
VLE/LMS registration	Only via email - admin@vle.bit.lk
Online Assignment/ Assessment matters	Only via email - occ@ucsc.cmb.ac.lk

- **Contact only the relevant email address.**

Email addresses that should be contacted with respect to relevant matters are given below.

All academic matters	acc@ucsc.cmb.ac.lk
BIT project matters	bitpro@ucsc.cmb.ac.lk
VLE/LMS registration	admin@vle.bit.lk
Online Assignment/ Assessment matters	occ@ucsc.cmb.ac.lk
External Degrees Centre	aredc@ucsc.cmb.ac.lk
Any other matters	aredc@ucsc.cmb.ac.lk

10.4 OTHER PERSONNEL

Following staff members are directly connected with the BIT programme. However, you may directly communicate only with those listed with email and it should be for appropriate purpose.

Web Master for www.bit.lk web site

Email: webmaster@ucsc.cmb.ac.lk

Online Course Coordinator

Email: occ@ucsc.cmb.ac.lk
Tel: 011-2581245   Ext: 8947

VLE Administrator (Access to VLE)

Email: admin@vle.bit.lk
Tel: 011-2591080   Ext: 8947

VLE Facilitator (VLE Content)

Email: http://vle.bit.lk/
Tel: 011-2591080

Note: While all necessary information pertaining to students reading for the BIT degree is included in this handbook, the UCSC of the University of Colombo reserves the right to revise such information without prior notice.

Assistant Registrar,
External Degrees Centre,
University of Colombo School of Computing,
UCSC Building Complex,
35, Reid Avenue, Colombo 00700,
Sri Lanka

011-2581245/ 7
011-2587239

http://www.bit.lk
http://bit.ucsc.cmb.ac.lk