

1. Background of the Organizations Associated with the Foundation in Information Technology (FIT) Programme

1.1 University of Colombo School of Computing (UCSC)

The teaching of computing was started as early as in 1967 in the then University of Ceylon. By 1968, a Statistical Unit was setup in the University of Colombo as a separate unit of the Department of Mathematics. The main function of this unit was to undertake consultancy and training in Statistics. Later, Professor V.K. Samaranayake together with Dr. Roger Stern of University of Reading, UK enhanced the unit to a Statistical Consultancy and Data Processing Service (SCADPS) Center, which became the forerunner to many of the later developments in industry interaction. By 1985, this center had grown into the Department of Statistics and Computer Science (DSCS). The major function of this department was the formation of special degree programmes for both statistics and computer science. From this department for the first time in Sri Lanka, a post graduate diploma programme in computer applications was launched in 1986.

In 1983 on a request by Prof. Mohan Munasinghe the then Presidential Advisor on Energy and Chairman designate of the Computer and Information Technology Council of Sri Lanka (CINTEC), the Institute of Computer Technology (ICT) project was conceived, and University of Colombo was assigned to develop it with funding from the Japan International Corporation Agency (JICA). This resulted in 1987 in the establishment of the Institute of Computer Technology (ICT) at the University of Colombo to cater specifically to the needs of the IT Industry.

In 1985, UNDP identified the University of Colombo as a suitable candidate to undertake the development of a M.Sc. programme in Computer Science for the first time in Sri Lanka. A grant was supplemented with the provision of a Microcomputer Laboratory by UNDP with the assistance from the Republic of Korea. By this time the DSCS had acquired the necessary equipment and trained staff to offer a Bachelors Degree in Computer Science. For the first time in the Sri Lankan university system, 20 students were selected to specialize in Computer Science in 1985 with another 30 postgraduate students undertaking a Masters Programme in Computer Science.

Over the years, the number of students selected from the Science Faculty to offer Computer Science as a specialization increased from 20 to 40. In 1997, it was decided to provide for the first time a direct entry to the Computer Science study programme through the UGC with a batch of 50 students entering.

In the year 2001, the DSCS separated into two departments, one for Computer Science and the other for Statistics. However, this action itself was not enough to expand computer science education to meet demands of industry since the Department of Computer Science (DCS) was a department within the restrictive framework of a regular Faculty setup. The ICT, on the other hand, enjoyed much more autonomy and had benefited from receiving a large amount of resources from JICA and other donors.

In September 2002, University of Colombo School of Computing (UCSC) was established by merging The Institute of Computer Technology (ICT) and The Department of Computer Science (DCS) both of the University of Colombo, as the first center of higher learning of computing in Sri Lanka. UCSC now conducts 3 undergraduate programmes for students admitted through the University Grants Commission (UGC). A BCSc 3 year and a B.Sc (Computer Science) 4 year degree programme and a 3 year Bachelor of Information & Communication Technology B.ICT degree programme. The BICT programme was introduced to fill the gap in the industry between business requirements and technical solutions. Two Masters programmes in Computer Science & Information Technology admit a total of around 175 students. M.Phil and Ph.D programmes were introduced by the UCSC since year 2002. Computer Science courses are also conducted for first, second, third and fourth year students of the Physical and Bio Science streams of the Faculty of Science, University of Colombo. The vision of the UCSC is to be a center of international repute in training in Information and Communication Technologies (ICT).

The major goal of the UCSC is to prepare students for careers in Information and Communication Technology as Software Developers, Systems Analysts, Network Administrators, Database Administrators, Web Developers, IT Managers, IT Strategic Planners and IT Policy Makers.

1.2 Computing Services Center (CSC)

The Computing Services Center (CSC), which is the Consultancy arm of the UCSC was established by the Institute of Computer Technology (ICT) & the Department of Statistics and Computer Science (DSCS) in 1990 to provide Consultancy Services to the IT industry and related industries using the human and material resources of the UCSC. The combined staff of UCSC and CSC consists of 17 Ph.Ds, 02 M.Phils, 10 M.Sc.s, 01 M.S.Sc, 03 MBA, 03 PG Diplomas, 14 B.Sc.s & 01 B.Dev.

CSC has been involved in a large number of Human Resource Development projects in IT, Consultancy projects, Systems Developments, Tender evaluations, Systems recommendations, Web site development, Feasibility studies, Systems design, Acceptance tests for computer hardware and software, Desktop publishing and printing, Statistical analysis and Recruitment tests to many organizations in the public and the private sector. Being institutions of the University of Colombo occupying the same building, the UCSC, and the CSC share their resources, equipment and manpower in these consultancy assignments.

Training courses ranging from awareness to specific skills such as Personal Computer Applications, Upgrading & Maintenance of personal computers, Unix/Linux Network & Systems administration, CISCO Networking CCNA/CCNP Hands-on-training, Java, Computer aided Drafting using AutoCAD, Advanced architectural 3D modeling & rendering using AutoCAD are conducted by the CSC during weekday evenings and weekends.

1.3 Advanced Digital Media Technologies Center (ADMTC)

This center 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 as a 3 year Technical Cooperation project between the Government of Japan and the Government of Sri Lanka from June 2002 to May 2005.

The ADMTC is equipped with a state of the art digital studio, development laboratories and training laboratories. In addition to conducting multimedia courses for undergraduates, ADMTC conducts the following training programmes targeted for people in the industry.

- Advanced multimedia web design and development techniques
- Digital video production and animation
- Dynamic web application development with PHP and MySql
- Web application with Macromedia Flash & other tools
- Interactive multimedia content for web application with Macromedia, Flash & Other tools
- 3D Modeling & Animation
- Graphic Design & Creativity Development

Special Training Courses

- Third country training programme on e-learning technology
- In country training programme on e-learning technology (Non-residential)
- In country training programme on e-learning technology (Residential)

1.4 Professional Development Center (PDC)

PDC serves as the primary interface between the undergraduates and the industry.

The objective of PDC is to enhance the professionalism of the undergraduates and the staff of the UCSC. It does this by addressing the following issues:

- Development of professional skills
- Improving the Industrial relevance of courses taught
- Building social & inter-cultural harmony

The PDC implements an industrial placement programme for UCSC Computer Science undergraduates and industrial visits for the BICT 2nd year undergraduates.

1.5 e-Learning Center (eLC)

The UCSC was identified by donor agencies such as Swedish International Development Agency (Sida) and European Union Asia Link Programme as an ideal location for a center of excellence in e-Learning. Primary aim of eLC was to serve over 1000 internal undergraduates and approximately 5000 external undergraduates of UCSC. eLC programmes include:

Establishment of a National Center of Excellence in e-Learning (NeLC)

Research & Development in e-Learning

Capacity building & training

Development of Interactive e-Learning programmes

Providing consultancy services in e-Learning

2. Job Opportunities in Information & Communication Technologies (ICT)

The 21st Century would be dominated by ICT and there is a growing need for ICT professionals. This, together with the critical shortage of IT professionals today, translate into opportunities for those in ICT as well as those 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 ICT and increase educational opportunities in the sphere.

3. The External Degree (BIT) Programme

Taking into consideration the job opportunities that exist for ICT graduates in Sri Lanka & overseas, the UCSC (formerly Institute of Computer Technology) took the initiative to launch the External Degree (BIT) programme leading to the award of Degree of Bachelor of Information Technology (External) – BIT.

The UCSC having the most advanced training resources and experience in Sri Lanka in the field of ICT training conducts the Degree of Bachelor of Information Technology (External) programme. The University of Colombo will award the degree.

UCSC provides a well-defined detailed syllabus that would help to lay a solid foundation on which, a student can build his career in ICT. The syllabi will be constantly updated to meet the industry requirements. Model question papers, a list of recommended textbooks are provided to the students. In the year 2003, e-Learning was introduced to the Year one BIT students through a Learning Management System (LMS). This was possible through assistance given by Sida (Swedish International Development Agency). LMS assists the students in learning through self-evaluating quizzes, collaborative learning using group assignments etc. From year 2006 onwards, UCSC has commenced a full online learning environment called eBIT, for all registered students. Further support is given to BIT students by the regular TV programme telecast over TVLanka. Recommended text books have been made available in many public libraries throughout the country in response to student requests.

The expertise of more than 20 Ph.Ds, 05 M.Phils, 20 M.ScS and 03 M.B.As drawn from the University of Colombo, other Sri Lankan Universities and the ICT industry are associated with the programme, which makes the BIT a first in Sri Lanka to benefit from such expertise.

The BIT Programme is designed to:

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

The duration of the external degree (BIT) programme will be 3 academic years.

- A **Diploma in Information Technology (DIT)** will be awarded on successful completion of course examinations of the first year and all online assignments.
- A **Higher Diploma in Information Technology (HDIT)** will be awarded to holders of the IT Diploma on successful completion of course examinations of the second year and all online assignments.
- **Degree Certificate** (Bachelor of Information Technology – BIT) will be awarded on successful completion of year 1, year 2 and year 3 examinations and fulfillment of other requirements (online assignments, etc.).

4. FIT programme (Foundation in Information Technology)

Objectives of the FIT programme

- Create Computer Awareness and provide basic computer literacy to any person interested in obtaining such knowledge
- Encourage users to obtain skills in commercial ICT applications which are used widely in current working environments
- Encourage Internet access and use the facilities available in the Internet for gaining knowledge in various disciplines and use of Internet in communication
- Provide an understanding of various threats to Computer systems and preventive measures that could be taken
- Provide computer skills required by the BPO (Business Process Outsourcing) industry
- Improve mathematical knowledge of those intending to pursue higher studies
- Improve English Communication skills for higher studies or for gaining meaningful employment
- Facilitate those who do not have advanced level (G.C.E. A/L) qualifications to enroll in the BIT degree programme conducted by UCSC.

4.1 Course Structure

Effective from 01st December 2008

Course Code	Course Name
FIT 101	ICT Applications
FIT 201	English for ICT
FIT 301	Mathematics for ICT

5. Registration for Online Learning (Optional)

Applications and payment vouchers could be downloaded from the FIT website, <http://fit.bit.lk/> Once the duly filled applications and the payment vouchers are submitted to the FIT office, each candidate will receive his/her registration number along with the username and password to login to the LMS (Learning Management System). Registering for the LMS is optional.

Any person (whether registered for LMS or not) can obtain a copy of the Student Handbook as well the detailed syllabus on the payment of the relevant fee (Ref: **9.2**).

6. Examinations

6.1 Medium

Medium of Examinations is English.

6.2 Examination structure

There will be a computer based (e-test) on each course. Those who pass these e-tests would be called for practical tests (except for the course FIT 301).

The practical tests would consist of the following components:

FIT 101 (ICT Applications) – Keyboard skills, Document Formatting, Data Analysis, Presenting Data, Managing Databases, Surfing and Communicating on the net.

FIT 201 (English for ICT) – Listening, Speech and Writing

The examinations would be as follows,

Course Code	Course Name	Duration of e-test	Duration of practical test
FIT 101	ICT Applications	2 hours	1 hour
FIT 201	English for ICT	2 hours	1 hour
FIT 301	Mathematic for ICT	2 hours	No test

6.3 Applications to sit for the examinations

Applications for examinations will be entertained from registered candidates. Payment vouchers and examination application forms and an instruction sheet will be available in the FIT website (<http://fit.bit.lk/>). Students are expected to download them from the website. Use only the vouchers in the website to make the necessary payment. No other mode of payment will be accepted.

Important

Examination Application may be rejected on the following grounds:

- i) Not applying on prescribed forms
- ii) Non-payment of Examination fees

6.4 Examination Criteria

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

The pass mark for course examination shall be 50%.

6.5 Examination Admission Forms

An examination admission form should be obtained from the FIT office before presenting yourself for the Computer-based examination or any oral / practical examination.

6.6 Examination Rules and Instructions to Candidates

A candidate when sitting an examination must at all times have in his possession his admission form and his National Identity Card. In the event of loss of National ID a valid Passport or Postal ID or Photograph attested by an authorized person* must be produced

*(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)

In the event an examination malpractice is proved the following punishments are meted out:

- Cancellation of examination candidature
- Debarring from sitting the examination for a stipulated period of time with or without a fine being imposed
- Any other punishment meted out by the authorities of the University of Colombo School of Computing (UCSC)

Some of the possible malpractices are:

- Having on one's possession or near oneself notes, diagrams, articles etc. irrespective of its relevance to the examination.
- Removing from the examination hall stationery, tables, etc. supplied by the UCSC
- Copying
- Impersonation
- Other forms of dishonesty and unruly behaviour
- Obtaining or attempting to obtain improper assistance or cheating or attempting to cheat
- Aiding and abetting the commission of any of these offences
- Non adherence to examination procedures/rules

6.7 Release of Results

Results will be published in the FIT website (<http://fit.bit.lk/>)

6.8 Re-scrutiny of Answer Scripts

Under no any circumstance and for no reason what so ever will there be a re-scrutiny of answer scripts.

7. Award of the Certificate in Foundation in Information Technology (FIT)

7.1 Criteria for a Pass

Each course examination shall be graded according to the following scheme:

Marks	Grade	Level of Achievement
75-100	A	Distinction
60-74	B	Very good Pass
50-59	C	Pass
00-49	F	Fail

8. Certificates

8.1 Award of Certificate

Certificates will be awarded for all candidates who complete the FIT programme successfully. Levels of achievement would be indicated in the certificate.

8.2 Transcripts

Each candidate, whether he/she has passed or not, shall be provided with a transcript giving details of the grades, provided that, he/she makes an application for such transcript in the prescribed manner.

9. Fees & Payment Method

9.1 Programme Fees (For Sri Lankan Citizens)

Registration Fee (Valid for one calendar year)	Rs. 2500/=		
Examination Fees (e-test)	FIT 101	FIT 201	FIT 301
	Rs. 750/=	Rs. 750/=	Rs. 750/=
Fees for practical examinations	Rs. 1000/=	Rs.1000/=	No practical exam

Fees in respect of referred and re-referred course/practical examination(s) are same as above.

9.2 Miscellaneous Fees (For Sri Lankan Citizens)

Certificate for each course	Rs. 100/=
Recommendation letter for BIT	Rs. 100/=
FIT Certificate	Rs. 500/=
Syllabus	Rs. 250/=
Student Handbook	Rs. 250/=

NB

1. All payments can be made to any People's bank branch on prescribed vouchers that can be downloaded from the FIT website: <http://fit.bit.lk/> (Please use all 4 copies of the voucher)
2. Cash/Money Orders/Postal Orders will not be accepted
3. All fees are subject to revision.

10. Further Details

Contact Details

Address: Coordinator,
External Degrees Centre of UCSC,
221/2A, Dharmapala Mawatha,
Colombo 07,
Sri Lanka
Tel: +94-11-4720511/3
Fax: +94-11-2682331

For Technical difficulties Contact :

e-learning Center,
University of Colombo School of Computing
No : 35, Reid Avenue,
Colombo 07,
Sri Lanka.

Web site: <http://fit.bit.lk/>

email: fit@ucsc.cmb.ac.lk

Note: Contents of this Handbook are subjected to revision by the UCSC without prior notice.

January - 2008