

Diploma in Information Management and Technology

2016 / 2017



**Department of Library and Information Science
Faculty of Social Sciences
University of Kelaniya, Sri Lanka**

Diploma in Information Management and Technology Programme

1. Rationale

Information is considered a fundamental resource for improving the quality of governance and promoting socio-economic development in developing countries. In Sri Lanka, information is rapidly growing as a result of public and private development initiatives. Among these development initiatives, e-Sri Lanka, a national development project which includes a focus on rural development, meets a variety of information needs, while development initiatives in the service sector are raising the value of information as a commodity. On the other hand, information is essential to all organizations for their success. For example, good quality information improves decision-making, enhances efficiency and also allows organizations to gain competitive advantages. Therefore, most organizations are looking for ways to effectively seek and handle information about their internal and external environments. Moreover, in the education sector there is a growing emphasis on resource-based independent learning, an approach that requires well-developed library and information services. Under these circumstances, the social responsibility of the information management sector has increased. There is therefore an increasing need for educated, skilled information managers to fulfil the growing information needs of the Sri Lankan citizens.

The Sri Lankan government has identified its vision of higher education in the country as helping "Sri Lanka to be an international hub of excellence for higher education by 2020". Under this vision, all public and private universities as well as other tertiary education institutions have identified a need to produce skilful, competent, and well-educated professionals for Sri Lanka. IM personnel can be seen as falling within one of these professional categories. Hence, under the Sri Lanka's government's vision of higher education, Information Management (IM)¹ education is seen as important for fostering the development of a high quality, market oriented, and knowledge-based society.

The World Bank also suggests strategic initiatives for the development of the higher education sector that would make it more responsive to the needs of the labour market. One of these initiatives is expansion of access to higher education in areas of economic and social importance. Hence there is a growing need for providing equity of access to IM education and thereby fulfilling labour market needs in Sri Lanka.

¹ Information Management (IM) refers to "management and control of the full lifecycle of the information process: acquisition, organization, storage, retrieval, access/lending, and dissemination".

In 21st century, Information Management and Technology are components essential for almost all the disciplines including education. They are a mixture of theoretical, practical and analytical skills that improve the quality of education irrespective of the sphere or the role related to it. While some spheres feel the impact of Information Technology (IT) and Information and Communication Technology (ICT) mildly, there are certain professions and spheres which have undergone tremendous changes because of the advancement of IT and ICT. Information Management profession is a case in point who requires the education systems which have taken concern of the technological advancements and made necessary adjustments to utilize the new technology.

As a solution to the above problems, the Department of Library and Information Science (DLIS) being the pioneer institution of the discipline of Information management in the university system in Sri-Lanka intends to commence the Diploma in Information Management and Technology programme.

DLIS offers courses since 1973, its streamlined courses, teaching and research are aligned with the requirements of information management industry and community and conducts six degree programmes including master programme, MPhil and PhD. DLIS has so far produced more than 5000 graduates and most of them are in the forefront of managerial ranks in both public and private sector establishments at national and international level. As demonstrated in its history, DLIS is committed to provide different courses to meet the requirements of the information industry as a leader in information management education.

2. Target group – Information workers / Information Managers

In recent years, the amount of information available has increased exponentially due to the “development of powerful telecommunications and computer systems, and by global trading coupled with increased competition and the freeing of markets”. Moreover, the rapid expansion of large-scale digital libraries, database management systems, multimedia information systems and internet resources and services has also contributed to increasing the quantity of information. Therefore, with the profusion of data and the rapid emergence of new technologies in today's digital world, managing information is not an easy task. As a result, users face problems of interpreting and digesting these data as well as complexity and uncertainty. Since there are increasing problems of information overload and timely, accurate retrieval the effective management of information systems is vital to any successful organisation. The responsibilities of information managers/information professionals have also increased.

Information managers are one of the new information professional groups in the field of IM. Primarily, they select and classify information and provide access to information at the users' request. However, information managers require diverse skills, new thinking, and broadened

perspectives since they face rapidly changing corporate, regulatory, and technical challenges. Further, they are required to develop innovative ideas, assume leadership roles, disseminate information widely and demonstrate good management practices to successfully tackle current and future issues. The new information managers require a new level of skills, capabilities and talents to provide a better service to users because the effective management of information is dependent upon their quality and skills. There is a direct and urgent need for T-shaped information managers with cross-domain knowledge and specialized knowledge.

These requirements highlight the need for skilled and educated information managers in the field as well as emphasizing the importance of information management education because it is important for students to become knowledgeable and skilled information managers. Moreover, there is a need for information managers to keep their professional knowledge current since “no professional degree programme in the world can impart the learning to be sufficient forever”. Ameen further argues that learning must remain continuous to keep professional knowledge up-to-date and it is a responsibility of both individuals and their employers. Consequently, IM education is important to produce skilled and educated information managers and thereby to face the current and future challenges in the field of IM.

Information workers or information managers are mainly include ministry officials, officials of statutory bodies, educators, librarians, officers in charge of cultural centres, Nenasalas (electronic information centres) staff, personnel from information sectors (mass media, book publishers, archives and record managers, information centre managers), ICT professionals, officials of local and foreign NGOs involved in community development through multipurpose community telecentres, and staff of village knowledge centres. These information workers are spread across the country.

3. Objectives of the program

- I. To provide an advanced knowledge, skills, attitudes, mind-set and paradigm to the interested parties in the field of information industry.
- II. To provide each student with an opportunity to become competent information manager/worker and technology literate person in an effective and social manner.
- III. To strengthen national information industry for effective decision making, problem solving, and for serving relevant information to client.
- IV. To strengthen the career prospects of school leavers who do not obtain admission into a university.
- V. To provide human capital for the employment market of the country.
- VI. To assist and promote new venture creation of the country

4. Course Structure

<i>Course Code</i>	<i>Course Title</i>	<i>Course status</i>	<i>Credit value</i>	<i>Lecture contact Hours</i>
DIMT 13012	Information Literacy for all	Compulsory	2	30
DIMT 13024	Workplace ICT (Basic & Advance) Practical Project	Compulsory	4	60
DIMT 13034	Information Management Systems - Practical Project	Compulsory	4	60
DIMT 13044	Digital Living in Information Management Industry - Practical Project	Compulsory	4	60
DIMT 13054	Strategic Information Management	Compulsory	4	60
DIMT 13064	Marketing of Information, Products and services	Compulsory	4	60
DIMT 13074	Information security and preservation	Compulsory	4	60
DIMT 13084	Digital Media, Communication and technology – practical project	Compulsory	4	60
Total			30	450

5. Duration of the Diploma Programme

The duration of the diploma program is one year. The diploma comprises of two semesters. The duration of each semester will be 15 weeks. At the end of each semester, one week study leave will be provided and at the end of the course, examination will be conducted within two weeks after study leave. The diploma operates on a 'Course Unit System'.

6. Medium of Instruction

Sinhala/English

7. Admission Criteria

In order to be eligible for the entry to this study program, the applicant should fulfil one of the following requirements:

- I. Possess at least three passes at G.C.E. (Advanced Level Examination)
- II. Diploma Certificate in Library and Information Science (Part 1), of the Department of Library and Information Science, University of Kelaniya
- III. Diploma in Library and Information Science (Level 1), of Sri Lanka Library Association
- IV. Diploma in Information Management (Level 1), of the National Institute of Library and Information Science, University of Colombo.
- V. Any other qualification accepted by the senate of the University of Kelaniya, Sri Lanka.

7.1 Intake

The maximum number of students admitted to the Diploma programme will be 100.

7.2 Selection procedure

Suitable applicants will be selected by an interview.

7.3 Attendance

80% attendance is compulsory to sit the examination.

8. Evaluation Criteria

The individual course unit will be evaluated on the basis of the criteria stated in the syllabus and a relevant grade for each course unit will be assigned accordingly.

8.1. Evaluation and assessments

Each course unit will contain different types of continuous assessment techniques (assignments, practical project reports, placements/internships, class room tests, assessment of skills through

practice workshops, learning portfolios, field trips to selected institutes of national level, and written Examination) depending on the nature of the course unit. The type of continuous assessment and the marks allocated for continuous method will be announced at the beginning of the course unit by each lecturer.

The end year examination based on the rules, regulations, norms and standards lay down and approved by the university.

9. Final Grading System

A grading will be awarded (as per the table below) by aggregating the marks obtained for continuous assessments and the final examination. A grade point value as indicated below is assigned to each grade.

Range of Marks	Grade	Grade Points Value
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

Table 5 - Grade Points Value

- *Students are required to complete all course units and if they fail to complete a particular course unit, "absent" will be indicated.*

9.1 Re-sit examination

- I. A candidate who obtains a grade below C in a particular course unit may re-sit the examination in respect of the course unit for the purpose of improving the grade and the best grade obtainable at the re-sit examination is C.
- II. In the event a candidate obtains a lower grade while attempting to improve the grade he/she will be entitled to the previous grade.
- III. The maximum number of re-sit examinations permitted per course unit will be two where only one attempt offer at the same registration year.

9.2 Grade Point Average (GPA)

The overall performances of the students are assessed by calculating the Grade Point Average (GPA). GPA is the credit-weighted arithmetic mean of the Grade Point Values, which is determined by dividing the total credit-weighted Grade Point Value by the total number of credits. GPA shall be computed to the second decimal place.

GPA is calculated on the grade points and the weighted average given for each subject.

Example: A student who has completed three course units each of four credits and one course unit which of two credits, with the grades A,B,C and D respectively, the grade point calculation should be as follows.

$$\begin{aligned} &= \frac{4 \times 4.0 + 4 \times 3.0 + 2 \times 2.0 + 2 \times 1.0}{4 + 4 + 4 + 2} \\ &= \frac{16.0 + 12.0 + 8.0 + 2.0}{14} \\ &= \frac{38}{14} = 2.71 \\ &\mathbf{GPA = 2.71} \end{aligned}$$

➤ *All the prescribed course units for the programme will be taken into account in calculating the GPA for the award of the Diploma.*

10. Criteria for the Award of the Diploma

10.1 Pass

A student registered for the Diploma programme will be awarded the Diploma in Information Management and Technology if she/he satisfies the following conditions.

1. Obtained grades of C or better in all course units
2. Obtained a minimum cumulative GPA of 2.00 from all the course units
3. Complete the relevant requirements within the period of three year since first registration

10.2 Merit Pass

A student registered for the Diploma programme will be awarded the Diploma in Information Management and Technology with distinction if she/he satisfies the following conditions.

1. Obtained grades B or better in all course units
2. Obtained a minimum cumulative GPA of 3.70 from all the course units
3. Complete the relevant requirements at the first attempt of the examination

10.3 Distinction Pass

A student registered for the Diploma programme will be awarded the Diploma in Information Management and Technology with distinction if she/he satisfies the following conditions.

1. Obtained grades A or better in all course units
2. Obtained a minimum cumulative GPA of 4.00 from all the course units
3. Complete the relevant requirements at the first attempt of the examination

- *A candidate is entitled to receive a transcript giving grades obtained for each paper of the above examination after the confirmation of results by the Senate of the University of Kelaniya.*

11. Description of course

Course Code : DIMT 13012

Course Title : Information Literacy for all

Type/Status : Compulsory

Learning Outcome : At the end of this course unit students will be able to:

- Define Information literacy and identify components and models of information literacy
- Develop information literacy plan that is relevant to specific setting studied
- Identify and effective use of a variety of types and formats of potential sources of information
- Understand the value and nature of information and how it is organized and use it effectively
- Recognize different search strategies
- Evaluate information and its sources critically
- Cite sources following accepted citation styles and avoid plagiarism

Course Content : Definition of information literacy including components and models, Basic information literacy skills including critical thinking, reading skills, and independent learning, Introduction to the types and formats of potential sources of information, Organization of Information, Formulating search strategies, Evaluating sources, Plagiarism, Copyright, Censorship, Methods of citation

Methods of

Teaching & Learning : Lectures, Class Room Discussions, Hands-on activities, Skill development activities, and practical exercises

Scheme of Evaluation: Assignments, Presentations, and Final examination

The weights given to each component of the evaluation method is announced at the commencement of the module.

Recommended

Readings : Wilson, Gwenn (2016), **100% Information Literacy Success**, Cengage Learning, USA.

List-Handley, C., Heller-Ross, H., O'Hara-Gonya, E., Armstrong, A. (2013), **Information Literacy and Technology**, Kendall Hunt Publishing, Dubuque.

Course Code	: DIMT 13024
Course Title	: Workplace ICT (Basic & Advance) Practical Project
Type/Status	: Compulsory
Learning Outcome	: At the end of this course unit students will be able to: <ul style="list-style-type: none">• Understand the importance of making effective use of ICT in the workplace• Identify the ICT requirements of workplace tasks• Make safe use of an ICT system to undertake workplace tasks• Use ICT to find and select information in the workplace• Apply ICT tools for improving workplace performance
Course Content	: Definition of ICT strategies, Benefits of establishing ICT strategies, success factors, and its impact, Roles of ICT tools in raising productivity, Types of ICT tools used at workplace, Introduction to Microsoft Office and practicals – Word, Excel, and PowerPoint, Microsoft Office 365, Internet technology including email, Computer viruses and management strategies, Malicious materials (malware, adware, spams) and their management, Social media 2.0.
Methods of Teaching & Learning	: Lectures, Class Room Discussions, Hands-on activities, and Presentations
Scheme of Evaluation:	Assessment by report and presentation on applying selected ICT tools for improving workplace performance. <p>The weights given to each component of the evaluation method is announced at the commencement of the module.</p>
Recommended Readings	: Korunka, C., Hoonakker, P. editor (2016), The impact of ICT on quality of working life , Springer, New York U.S. Department of Labour (2014), Framework for Designing and Implementing Accessible Information and Communication Technology (ICT) Strategic Plans: Accessible Technology in the Workplace Initiative , America

Course Code	: DIMT 13034
Course Title	: Information Management Systems - Practical Project
Type/Status	: Compulsory
Learning Outcome	: At the end of this course unit students will be able to: <ul style="list-style-type: none">• Understand the principles and practices of information management systems• Identify and define basic principles and concepts of database management systems• Create databases by using relevant software packages• Understand and apply the concept of E-Governance and E-Sri Lanka introduced by the government of Sri Lanka• Use open sources software effectively in automating library or information centre
Course Content	: The principles and practices of information management systems within an organization with the concept of E-Governance and E-Sri Lanka, Database Management Systems i.e. MySQL or Microsoft Access, Open source software i.e. Koha, cloud computing
Methods of Teaching & Learning	: Lectures, Hands-on training, and Presentations
Scheme of Evaluation:	Assessment by report and presentation on applying selected information management system for improving workplace performance. The weights given to each component of the evaluation method is announced at the commencement of the module.
Recommended Readings	: Rainer, R. K., Prince, B., Watson, H. J. (2015), Management Information Systems , 3 rd Edi. Wiley, New Jersey Laudon, K. C., Laudon, J. P. (2015), Management Information Systems: Managing the Digital Firm , 14 th Edi. Pearson Education Ltd, England

Course Code	: DIMT 13044
Course Title	: Digital Living in Information Management Industry - Practical Project
Type/Status	: Compulsory
Learning Outcome	: At the end of this course unit students will be able to: <ul style="list-style-type: none">• Understand the impacts of a range of digital technologies on individual quality of life, work, and leisure• Research specific technologies and understand how to use them effectively and mitigate their risks• Understand and apply concepts of technology adoption, diffusion, use and abandonment in individual, organizational, and citizenship contexts• Develop personal strategies for effective adoption and use of digital technologies to meet work and life goals

Course Content : Impact of digital technology on quality of life, work and play and examine what it means to be an individual in the 21st century. Smart use of smart phone, Facebook, Flickr, GoSoapBox, LinkedIn profile, prezi, Skype, Viber, YouTube, Zoom. Opportunities and risks arising from such technology. Awareness, skills, and effectiveness in 'digital living'.

Methods of

Teaching & Learning : Lectures, Hands-on training, and Presentations

Scheme of Evaluation: Assessment by report and presentation on applying selected digital technologies for improving workplace performance or quality of life.

The weights given to each component of the evaluation method is announced at the commencement of the module.

Recommended

Readings : Livingstone, S., Sefton-Green, J. (2016), **The Class: Living and Learning in the Digital Age (Connected Youth and Digital Futures)**, New York University Press, New York

Nicholas, T. J. editor (2012), **Introduction to Digital Culture: Living and Thinking in an Information Age**, Cognella Academic Publishing, San Diego, CA

Course Code	: DIMT 13054
Course Title	: Strategic Information Management
Type/Status	: Compulsory
Learning Outcome	: At the end of this course unit students will be able to: <ul style="list-style-type: none">• Describe the importance of strategic information management in the workplace.• Explain the strategic planning, implementation and use of information and information systems in the management of an organisation.
Course Content	: Corporation-wide information architecture, Alignment of information services with the corporate environment, Inter- and intra- organisational systems, Strategic alliances, Sustaining innovation, IT for strategic advantage.
Methods of Teaching & Learning	: Lectures, Case studies, and Class Room Discussions
Scheme of Evaluation	: Assignments, Presentations, and Final Examination The weights given to each component of the evaluation method is announced at the commencement of the module.
Recommended Readings	: Peppard, J., Ward, J. (2016), The Strategic Management of Information Systems: Building a Digital Strategy , 4 th Edi. John Wiley & Sons Ltd, Hoboken Galliers, R. D., Leidner, D. E. (2009), Strategic Information Management: Challenges and Strategies in Managing Information Systems , 4 th Edi. Routledge, New York

Course Code	: DIMT 13064
Course Title	: Marketing of Information, Products and services
Type/Status	: Compulsory
Learning Outcome	: At the end of this course unit students will be able to: <ul style="list-style-type: none">• Understand the nature, functions, and essentials of marketing information , products, and services• Acquire and apply skills on marketing• Understand information, products, and services as a marketing commodity• Promote information seeking habits among stakeholders in order to develop information marketing• Develop accurate information, products, and services through feedback mechanism• Develop customer care and service evaluation
Course Content	: Definition and key concepts of marketing, Information marketing, Concepts pf products and services in libraries and information centres, Marketing mix, Promotional activities, Marketing mix in electronic environment, Customer Relationship Management (CRM).
Methods of Teaching & Learning	: Lectures, Class Room Discussions, and Presentations
Scheme of Evaluation:	Assignments, Presentations, and Final Examination
	The weights given to each component of the evaluation method is announced at the commencement of the module.
Recommended Readings	: Haswell, K. (2016), Passion to Profits: Use Your Talents & Passion to Make Money via Information Marketing... Kindle E-Commerce & Talent to Profits , Watkins Publishing, London Garcia, R. (2014), Creating and Marketing New Products and Services , 1 st Edition, CRC Press, New York

Course Code	: DIMT 13074
Course Title	: Information security, ethics and preservation
Type/Status	: Compulsory
Learning Outcome	: At the end of this course unit students will be able to: <ul style="list-style-type: none">• Explain security issues and challenges faced by modern library, information centres, or and organizations• Familiarized the impact of IT on individuals, organization and society• Make aware how to use information by preserving privacy, confidentially work norms• Acquaint the repercussions of information piracy plagiarism• Demonstrate digital collections through open data and online systems• Manage records and apply principles of conservation and preservation of documents
Course Content	: Information related to security principles and concepts, security policies, and ISO standards on security measures, implementation of security measures, importance of employee awareness in protecting information, highlighting making aware of individual's responsibility towards IS. Ethical standards and practices of information, Record management, Concept of preservation and conservation of materials from printed to digital formats.
Methods of Teaching & Learning	: Lectures, Class Room Discussions, and Presentations
Scheme of Evaluation:	Assignments, Presentations, and Final Examination
	The weights given to each component of the evaluation method is announced at the commencement of the module.
Recommended Readings	: Munir, K. (2016), Security Management in Mobile Cloud Computing (Advances in Information Security, Privacy, and Ethics) , 1 st Edi. IGI global, Hershey, PA Merkow, M. S., Breithaupt, J. (2015), Information Security: Principles and Practices , Wiley, New Jersey

Course Code	: DIMT 13084
Course Title	: Digital Media, Communication and technology – practical project
Type/Status	: Compulsory
Learning Outcome	: At the end of this course unit students will be able to: <ul style="list-style-type: none">• Understand nature and functions of internet, digital library• Create a web page and design a digital library• Manage information and retrieve information from internet as well as digital library
Course Content	: Basics of Internet and its services and facilities, Intranet services and facilities, Web page development with Content Management System and web design, Digital library – characteristics and concepts, digital library services, digital information delivery, construction of digital library using Greenstone or DSpace.
Methods of Teaching & Learning	: Lectures, Hands-on training, and Presentations
Scheme of Evaluation:	Assessment by report and presentation on developing website or digital library for improving workplace performance. The weights given to each component of the evaluation method is announced at the commencement of the module.
Recommended Readings	: Chayko, M. (2016), Superconnected: The Internet, Digital Media, and Techno-Social Life , Sage, London Neuman, W. R. (2016), The Digital Difference: Media Technology and the Theory of Communication Effects , Harvard University Press, Cambridge