

# National School of Business Management Faculty of Computing

# **Award Handbook**

**BSc in Management Information Systems (Special)** 

Date of Production: July 2015

Date of Revision: July 2020

# Contents

1.	١	Welcome to the Faculty3			
2.	ι	Usef	ful Contacts and Resources	4	
	2.1	-	Academic Contacts	4	
	2.2	<u>)</u>	Administrative Contacts	4	
	2.3	}	Useful Internet Resources	4	
3.	١	Wha	at are the aims of the award?	5	
4.	١	Wha	at are the specific award learning outcomes?	6	
5.	ŀ	How	is the award structured?	7	
	5.1	-	Year 1 /Level 1 (SLQL 3)	7	
	5.2	<u>)</u>	Year 2 /Level 2 (SLQL 4)	7	
	5.3	}	Year 3 /Level 3 (SLQL 5)	8	
	5.4	1	Year 4 /Level 4 (SLQL 6)	8	
6.	ŀ	How	will I learn on this award?	9	
7.	ŀ	How	would my progress be assessed?	9	
	7.1	-	Module Grading Scheme	9	
	7.2	) -	Module Completion	.10	
	7.3	}	Progression	.10	
	7.4	ļ.	Graduation and Award Classification	.10	
8.	9	Supp	oort and Guidance	.11	
	8.1	-	Academic Support and Guidance	.11	
	8.2	2	General Support and Guidance	.11	
9.	ŀ	How	do I hand in assignments?	.11	
1(	).	In	dustry Placements	.11	
1	1	Fi	nal Year Project/Dissertation	.12	

# 1. Welcome to the Faculty

Welcome to the Faculty of Computing at National School of Business Management.

NSBM is a dynamic young organization offering innovative educational products to cater for the growth of fast changing business and industrial economies. Let me congratulate you in becoming part of this dynamic organization.

Your course of study will be up to date and relevant, will be serviced by well qualified staff, and will also be geared to preparing you for life and employment. NSBM Graduate profile and student charter aims to help all of our students achieve what they want to in life. As one of our students we expect you to work hard, to set high standards for yourself. To help you to succeed you will have access to excellent staff and facilities, and also to a range of student support services to help deal with your particular needs. Of course, to do this academic, administration and technical staff that you come across as part of your studies will readily advise and support you. Your part is to take your study seriously, to ensure that you set-aside appropriate time for your study, and to make full use of the diverse range of learning opportunities – both in class and directed study outside of classes – provided by your course. It is important to us that you are successful and that you go on to be a good ambassador for NSBM.

Inevitably at the start of all study programmes you will be bombarded with a host of well-intentioned information. Some of that information is immediately important to start your studies and make sure that you are in the right place at the right time. Some information you will need later in your course, whilst other information is about the services NSBM offers generally which you may need to make reference to in the future. We suggest that you download the **NSBM student handbook** and keep it for reference and familiarize yourself with the range of information it contains. This should be the first document of your own e-archive - get into the habit of downloading essential documents like module descriptors and module handbooks when the course starts.

You are now part of the NSBM family and we look forward to working with you to help you to succeed as an NSBM Graduate.

Very best wishes, Dean Faculty of Computing

#### 2. Useful Contacts and Resources

#### 2.1 Academic Contacts

Programme Director: Chaminda Wijesinghe (chamindaw@nsbm.lk)

Head of Computing School: Chaminda Rathnayake (chaminda@nsbm.lk)

#### 2.2 Administrative Contacts

Programme Coordinator: Devika Weerawardana (devika@nsbm.lk)

Carrier Guidance Advisor: Chaminda Wijesinghe (chamindaw@nsbm.lk)

Programme Office: Pondeepa Udari (udari@nsbm.lk)

Examination Unit: Pamoda Piumini (pamoda@nsbm.lk)

Library: Mr. B K Jayasinghe

#### 2.3 Useful Internet Resources

NSBM website can be found at: <a href="http://www.nsbm.lk">http://www.nsbm.lk</a>. Even though this site is addressed to public, you can find important information related to NSBM, school of computing and your award on this site.

NSBM uses Moodle as an online learning environment, and information on modules on which you are enrolled can be accessed from <a href="http://lms.nsbm.lk">http://lms.nsbm.lk</a> Note: you can only get access to those modules that you are studying – if you cannot gain access to material, it may be that you are not correctly enrolled on the module – make sure you let your module tutor or programme administrator know.

You will also be able to access your Moodle award or subject community which will provide award/subject information and updates including e-copies of this award handbook, extracurricular talks and events relevant to your subject area and award discussion forums.

The Moodle Learning Management System and other useful online systems can be found at: <a href="http://intranet.nsbm.lk">http://intranet.nsbm.lk</a>

# 3. What are the aims of the award?

The aims of the award are to provide students:

- To graduates with a combination of strong technical and business skills, including oral and written communication, bridging the gap between business users of computer systems and technicallytrained specialists.
- to develop confidence to use latest concepts to design and develop Software solutions for an organization/individual;
- to develop long learning aptitude to acquire new knowledge required for an assignment which associated with novel concepts;
- to admire intellectual works of others and to abide by industry norms and ethics stipulated by professional bodies;
- to collaborate in groups to achieve common goals;
- to satisfy the academic criteria required for the membership of professional institutions.

In addition to the above award specific outcomes, students are prepared for the following generic attainments of a 4 year honors degree award:

- critically analyze data, make judgments and propose solutions to problems;
- use practical skills and enquiry efficiently and effectively within the area of study;
- construct and sustain arguments and use these arguments, ideas and techniques in problem solving:
- demonstrate awareness of the current developments in the area of study;
- exercise initiative, personal responsibility and accountability;
- exercise leadership in the professional environment/work place; and
- demonstrate positive attitudes and social responsibility.

The award allows the graduates to join industry as entry level professionals in the field of computing and related disciplines as Computing solution Analysts, Designers, Architects, Developers, testing and quality assurance specialists, computing system administrators, business/technology analysts and systems integrators, and software developers.

Graduates who study the four-year degree, can enter the employment market in various sectors. Main employment sectors include:

- Computing industry; state and private, organizations those provide ICT solutions to public and private sectors
- Large enterprises; Banking, Insurance, Telecommunications, manufacturing, retail and digital services industries
- Education industry
- Government and defence
- Self employment (Entrepreneurs/Computing service providers)

# 4. What are the specific award learning outcomes?

At the end of the study programme you should be able to:

#### **Knowledge & Understanding of:**

- A wide range of principles and tools available to the management information systems, particularly information systems developer, such as design methodologies, programming languages, case studies, software libraries and user interface technique.
- The principles of computer systems, including operating systems, networks and communication.
- The professional and ethical responsibilities of computer professional including understanding the need for quality
- The principles and techniques of a number of application areas informed by the research directions of the subject, such as databases, decision support systems, information management, project management, and data mining.
- The application of computing in business and management contexts.

#### Intellectual (thinking) skills - able to

- Solve a wide range of problems related to the analysis, design and construction of management information systems.
- Design and implement a software system in the area of making decisions and strategic planning.
- Identify a range of solutions and critically evaluate and justify proposed design solutions for management information systems, such as decision making, business systems, project planning and management.
- Self-learning through using internet and electronic media.

# Practical skills - able to

- Plan and undertake a major individual project.
- Prepare and deliver coherent and structured verbal and written technical reports.
- Give technical presentations suitable for the time, place and audience.
- Use scientific literature effectively and make discriminating use of Web resources.
- Design, write and debug computer programs in appropriate languages.
- Use appropriate computer-based design support tools.

#### Transferable skills - able to

- Display an integrated approach to the deployment of communication skills.
- Use IT skills and display mature computer literacy.
- Work effectively with and for others.
- Strike the balance between self-reliance and seeking help when necessary in new situations.
- Display personal responsibility by working to multiple deadlines in complex activities.
- Employ mathematical skills as appropriate.

### 5. How is the award structured?

The award is designed to be taken on a full-time basis even though, during years 3 and 4, all learning sessions are held after-hours and weekends. This is to encourage you to continue with any potential employment opportunities after the industry placement that starts from the year 3.

BSc in Management Information Systems is a 4 year programme with total credit weighting of 120. Each year you complete 30 credits by following different number of subject modules. During the 3<sup>rd</sup> year you undertake an Industry placement worth 15 credits. During your final year of studies you are required to undergo an Award project worth 10 credits.

# 5.1 Year 1 /Level 1 (SLQL 3)

The first year of the degree provides students with the knowledge of fundamentals of computing which is important to advance their knowledge in any computing discipline. This will include knowledge in Computer Programming, Operating Systems, Database Concepts, Web Technologies and Systems Analysis and Design.

**Table 1** – Level 1 modules for all Software Engineering awards.

Term	Module	Module Name	Credit
	Code		Value
	BMIS101	Introduction to Computer Science	2
	BMIS 102	Quantitative Techniques for Computing	2
1	BMIS 103	Programming with C Language	2
(18 weeks)	BMIS 104	Computer Technology	2
	BMIS 105	Database Management Systems	3
	BMIS 106	IT Professional (NGPA)	2
2	BMIS 107	OOP with C++	3
(10 weeks)	BMIS 110	Internet Technology	3
	BMIS 108	Programming in JAVA	4
3	BMIS 109	System Software	2
(18 weeks)	BMIS 111	Systems Analysis and Design	3
	BMIS 112	System Design Project	4

Note: Please refer module descriptors for module learning outcomes (and mappings to programme learning outcomes), detailed subject content and teaching & assessment strategies.

# 5.2 Year 2 /Level 2 (SLQL 4)

The second year of the degree aims at providing students with advanced knowledge in demanding topics in the computing industry such as JEE, C#, Advanced Database Concepts, MS SQL Server, Oracle, Computer Networking, and Software Development Methodologies. Familiarization in these subjects will improve students' confidence when working as interns in their third year.

**Table 2** – Level 2 modules for all Software Engineering awards.

Term	Module Code	Module Name	Credit Value
1	BMIS 201	Management Practices	1
1 (10o olso)	BMIS 202	Software Engineering	2
(18 weeks)	BMIS 203	Data Structures & Algorithms	2

	BMIS 204	Advance Database Management Systems	3
2	BMIS 205	Object Oriented Programming and Design I	4
(10 weeks)	10 weeks) BMIS 206 Agile Software Development Methodologies		3
	BMIS 207	Object Oriented Programming and Design II	4
2	BMIS 208	Distributed Processing	2
3 (18 weeks)	BMIS 209	Data Warehousing and Data Mining	3
(10 Meeks)	BMIS 210	Computer Networking	2
	BMIS 212	Software Development Project	4

Note: Please refer module descriptors for further module details.

# 5.3 Year 3 /Level 3 (SLQL 5)

In Year 3, students continue to follow 6 core modules including the internship module that amounts to a total of 30 credits. Table 3 below lists down the modules available at level 3.

Students undertake internship in six month period along with one to two subjects delivered after hours and during the weekend. In the remaining six months of Level 3, students continue to follow the remaining 5 to 6 subjects delivered after hours and the weekends.

Student internship placement and monitoring is done by NSBM. If students have a preference for an organization to do their internship, they are allowed to proceed with the choice, provided NSBM can approve the duties and responsibilities assigned to them by the organization to be compatible with the requirements of the internship stipulated by the degree programme. The interns must report to NSBM once a week during this period and their performance will be monitored by an academic supervisor appointed by NSBM. After successful completion of the internship the students will undoubtedly be more comfortable and confident in facing job interviews and carrying out their job related responsibility.

**Table 3** – Level 3 modules for the Software Engineering awards.

Module	Module Name	Credit	Туре
Code		Value	
BMIS 301	Industrial Training (Internship)	15	Core
BMIS 302	Management Information Systems	3	Core
BMIS 303	Database and Information Resource	3	Core
DIVIIS 505	Management		
BMIS 304	IT Project Management	3	Core
BMIS 305 Fundamentals of E- Business			Core
BMIS 306 Computer Architecture			Core

Please refer module descriptors for further module details.

# 5.4 Year 4 /Level 4 (SLQL 6)

In Year 4, BSc in MIS students follow 8 core modules including the award specific project that weigh 10 credits and continue throughout the year. Table 4 specifies the modules available for level 4. Refer module descriptors for more information on each module.

**Table 4** – Level 4 modules for all Engineering awards within the programme.

Module Code	Module Name	Credit Value	Туре
BMIS 401	Management Support Systems	3	Core
BMIS 402	Technical Communication	2	Core

BMIS 403	Information Security	3	Core
BMIS 404 Object Oriented Programming III		3	Core
BMIS 405	Business Policy and Strategy	3	Core
BMIS 406 Professional Issues in ICT		3	Core
BMIS 407	Software Quality Assurance	3	Core
BMIS 408	Final Project	10	Core

In the final year of study, students culminate their learning by acquiring specialized subject content required for diverse industries and knowledge on contemporary developments. Students also get an opportunity to showcase their learning over the years via the award specific project.

#### 6. How will I learn on this award?

Your learning opportunities include, e-learning and classroom based learning, and involves a broad spectrum of activities appropriate to the learning outcomes and the assessment methods. These activities range from entirely self-managed study, timetabled formal lectures, tutorials, laboratory based work and presentations. You will have opportunities to use and develop theoretical knowledge, computer based models, and to design, to implement and to test. The transferable skills of presenting, writing, discussing, working with others, and managing your own time are developed through the programme.

Enquiry-based learning is a particularly effective approach to learning and involves you on your own or in a project group being asked to investigate, collect and analyse information and generate new knowledge. This is considered to facilitate deep as opposed to shallow learning.

In developing the programme consideration has been given to the overall learning and assessment strategy, and to the impact on your workloads. As would be expected for any degree programme, you are expected to have a high level of commitment and to be responsive to the challenges at their relative levels as you progress through the programme. Part of these challenges is for you to develop your time management and personal learning skills. Assignments are normally given to you early in a module and you should have ample opportunity to complete the work if you manage your time effectively.

The requirements of the modules will be communicated to you through module descriptors and by discussions with module tutors.

# 7. How would my progress be assessed?

#### 7.1 Module Grading Scheme

The Grading System for study modules of this programme are given in Table 5.

Table 5 – Module Grading Scheme (Source: UGC Circular 901)

Range of Marks	Grade	Grade Point (GP)	Classification
85-100	A+	4.2	
70-84	Α	4.0	First Class
65-69	A-	3.7	
60-64	B+	3.3	Second Upper
55-59	В	3.0	Second Lower
50-54	B-	2.7	Pass

45-49	C+	2.3	
40-44	С	2.0	
35-39	C-	1.7	
30-34	D+	1.3	NA
25-29	D	1.0	
00-24	F	0	

# 7.2 Module Completion

A student requires obtaining a minimum of 40 marks (C Grade/GP 2.0) for a module to be considered as having passed (completed) that module. Students not fulfilling this requirement for a module should retake the failed assessment components or the complete module with attendance as determined by the Module Examination Board. For the referred attempts of modules the marks are capped at 40 (C grade/GP 2.0). A completed module contributes the full credit allocation of that module towards the total credit requirement of the award.

A marginally failed module with a grade point not less than 1.3 could be compensated and award a pass (grade C/GP 2.0), on discretion of the award board. However, maximum of one module per level of study can be compensated and the final year project and industry placement modules shall not be compensated.

# 7.3 Progression

Students should pass all the required modules of a level to fulfill the credit requirement for that level. However, students can progress to study in the next level while having maximum of 3 outstanding modules (failed modules) in the previous levels.

Maximum of **seven years** from the year of enrollment is allowed for to complete all modules of the Degree Programme.

#### 7.4 Graduation and Award Classification

To complete an award and graduate, a student should complete all the module requirement of that award and gain 120 credits in total for BSc in Management Information Systems (Special) award.

For the determination of the award classification, a Grade Point Average (GPA) is calculated for each Level as the average of module GPs weighted by the credit value of each module.

Table 6 - Level weightings for the overall GPA calculation to determine the Award Classification

Level	Weight
1	25%
2	25%
3	25%
4	25%

The award classification is determined by applying the same criteria given for modules, which is shown in Table 5, to the OGPA.

# 8. Support and Guidance

### 8.1 Academic Support and Guidance

Throughout your course you will meet the Module Lecturers at the taught sessions. If you require additional advice and guidance, please do not hesitate to contact the Module Lecturers, Programme Director or the Programme Administrator.

Please contact your lecturer if you have any concerns about assessments or any other aspect of your course. Generic support with studying, assignments and assessments can be found on the NSBM intranet.

# 8.2 General Support and Guidance

If you have concerns about your ability to complete your course for any reason, you are strongly encouraged to speak to your Programme Director, Programme Administrator or any Lecturer that you are comfortable with.

# 9. How do I hand in assignments?

You will normally be required to hand in written assignments relating to the School of Computing modules either to the Programme Administrator or to the LMS (Learning Management System). Instructions for the submission of practical assignments will be included in the LMS or on assessments briefs.

It is your responsibility to ensure that you submit assignments on time and at the appropriate place.

**PLEASE NOTE** – we would strongly recommend that it is always better to submit your assignment on time even if you feel that you could have done better or might have needed a 'few more hours to finish it off'. Work which is submitted late will get a zero-grade.

Module lecturers will normally give out assignment details with plenty of time before submission to allow you to manage your time and develop your assessment. It is always advisable to start early on assignments, create early drafts, so that if just before submission something adverse happens you do have draft to hand-in.

Finally, of course, it is good practice to keep a hard or (backed-up) electronic copy of draft assignments just in case computers crash. Similar keep a copy of all submitted assignment just in case it gets lost, then you will have the receipt to prove that you handed it in, and a copy to replace what has been lost.

# **10.** Industry Placements

All Computer Science students have the opportunity to undertake a placement at the beginning of Level 3. Carrier Guidance Advisor will provide you with support in finding a placement.

The details of the Industry placement can be found in the Industry placement module descriptor and the 'Industrial Placement Handbook' is available to all students considering going on a placement. This handbook gives full information on the aims, objectives, requirements, supervision and assessment of an industrial placement. More information can be accessed via the LMS. Note that Industry placement module is a core/compulsory module and is not compensatable and student should score minimum of 40%.

# 11. Final Year Project/Dissertation

Award Project contributes 10 credits at level 4 for the Honors degree.

Fuller details are available in a separate Project Handbook, available at the commencement of Level 4. These are major pieces of individual investigative work involving planning, literature survey, practical and simulated experimentation, and detailed analysis. Assessment is based on a range of interim progress reports, a final project dissertation, and oral presentations. The project is intended to combine, develop and assess the range of your subject-specific and transferable skills.

At the appropriate time students will be able to choose a project, and assigned a supervisor.

Satisfactory completion of the Project module is a compulsory requirement and a minimum of 40% mark is required.