De La Salle-College of Saint Benilde
School of Management and Information Technology
Bachelor of Science in Information Systems

Program Specification

Awarding Institution	De La Salle-College of Saint Benilde
School	School of Management and Information Technology
Program Accreditation	PAASCU Level 2 Accredited
Name of Final Award	Bachelor of Science in Information Systems
Program Title	Bachelor of Science in Information Systems (BS-IS)
Description of the Program	The BS Information Systems Program includes the study of web and mobile applications and its effect on the information technology operations of organizations. Graduates of the program should be able to implement an information system, which considers complex technological and organizational factors affecting it. These include components, tools, techniques, strategies, methodologies, etc. Graduates help an organization determine how information systems and technology-enabled business processes can be used as strategic tools to achieve a competitive advantage. As a result, Information System professionals possess a sound understanding of organizational principles and practices so that they can serve as an effective bridge between the technical and management/users communities within an organization. This enables them to ensure that the organization has the information and the systems it needs to support its operations.
Expected Program Learning Outcomes	Upon completion of the B.S. IN INFORMATION SYSTEMS, learners are expected to: **PO1.** Apply system analysis and design concepts through various data gathering methodologies, standard convention and modelling languages to create a software documentation. **PO2.** Create dynamic and secured web and mobile using software development tools and industry-standard frameworks applications to meet system requirements.

	PO3. Adapt a project management integration framework guided by professional, ethical, and legal best practices in the community to ensure that projects are executed on time and within budget.
	PO4. Work independently in a God-centered professional practice with excellence, integrity, creativity and innovation sensitive to inclusivity and social responsibility.
Admission Requirements	All students must pass the Benildean Entrance Exam (BEE). The information regarding application, admission timetable, and application results may be viewed at [Benilde Admissions Center](#). Downloadable forms and school brochures are available from this site. Applicants applying to any degree or non-degree program offered by DLS-CSB are expected to provide a complete medical disclosure of past or present conditions that may have an effect on student learning and their intention to be a member of the Benildean community.

Program Overview	The Program consists of 168 units (158 academic units and 10 non-academic units) distributed as follows:
	
	CHED GE Core Courses 50
	DLS-CSB Institutional Courses 16
	IT Education Common Courses 18
	Information System Professional Courses 57
	Information System Capstone Project 9
	Practicum 6
	Information System Elective Courses 12
	                             TOTAL 168
	
	Elective Tracks:
	      Information Security
	      Data Science
	      Software Engineering

Curriculum and Program Structure	The curriculum and program structure are outlined in the course sequence. The curriculum map shows the alignment between the courses in the program and the program outcomes.
Teaching and Learning Strategy, Assessment	DLS-CSB espouses and promotes learner-centered parameters. The courses are delivered with emphasis on individual and collaborative activities where teachers design the environment for learning and guide the learners to develop the important competencies.

	A balance of theory and practice is achieved through lectures that are used to provide theoretical grounding and laboratory courses/sessions that incorporates hands-on, simulation and application development activities Alternative methodologies of teaching is commonly used, such as, case analysis, video/film showing, role playing or simulations, guided discovery, independent research, small group discussions, and group and individual presentations. A Learning Management System (LMS) is used as an on-line support that (1) provides a central repository where students can access resources anytime anywhere, (2) tracks the students' progress, (3) processes assignments, and exams, and (4) provides a venue for communication.
Academic Year Implementation	AY 2023-2024
Academic Year Revision	AY 2022-2023

COURSE SEQUENCE

Term 1				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
INCOMPU	Introduction to Computing	3		
ISPRGG1	Computer Programming 1	3		
LEADMGT	Organization and Management Concepts	3		
PURPCOM	Purposive Communication	3		
UNDSELF	Understanding the Self	3		
BICHECO	Bible and Church	3		
PATHFT1	Physical Activity Towards Health and Fitness 1(Movement Competency)	2		
CSBLIFE	College of Saint Benilde Student Life	(3)		
	TOTAL:	**20(3)**		
Term 2				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
FUNDSYS	Fundamentals of Information Systems	3		
ISPRGG2	Computer Programming 2	3	ISPRGG1	
ISFINMA	Financial Management	3		
MATWRLD	Mathematics in the Modern World	3		
SCITECH	Science, Technology and Society	3		
CRITHNK	Critical and Creative Thinking	3		

Course Code	Course Title	Units	Pre-requisite	Co-requisite
PATHFT2	Physical Activity Towards Health and Fitness 2 (Exercise Based Fitness Activities)	2	PATHFT1	
NSTP-01	National Service Training Program 1	(3)		
	TOTAL:	**20(3)**		

Term 3				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
PROFISS	Professional Issues in Information Systems	3		
ENTPROG	Enterprise Programming	3	ISPRGG2	
BUSPROC	Business Processes Management	3		
DSTALGO	Data Structures and Algorithms	3	ISPRGG2	
ITINFNT	IT Infrastructure and Network Technologies	3		
ASEANST	ASEAN Studies	3		
PATHFT3	Physical Activity Towards Health and Fitness 3	2	PATHFT2	
NSTP-02	National Service Training Program 2	(3)	NSTP-01	
	TOTAL:	**20(3)**		

Term 4				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
WEBDEVT	Web Development	3		
APPDAET	Application Development and Emerging Technologies	3	ISPRGG2	
SYSANDE	Systems Analysis And Design	3	BUSPROC	
BUSEVAL	Evaluation of Business Performance	3		
READHIS	Readings in Philippine History	3		
ARTAPRI	Art Appreciation	3		
PATHFT4	Physical Activity Towards Health and Fitness 4	2	PATHFT2	
	TOTAL:	**20**		

Term 5				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
UIUXDES	User Interface / User Experience Design	3		
APPINTR	Intermediate Application Development	3	APPDAET	
IENTARC	Enterprise Architecture for Information Systems	3		
ISINFOM	Information Management for IS	3	DSTALGO	
JORIZAL	Life and Works of Rizal	3		
CONWORL	Contemporary World	3		
	TOTAL:	**18**		

Term 6				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
ISELEC1	Information Systems Elective 1	3		
MOBDEVT	Mobile Development	3		
ISPRMGT	Information Systems Project Management	3		
INFODBM	Database Management	3	ISINFOM	

Course Code	Course Title	Units	Pre-requisite	Co-requisite
GELECT1	General Education Elective 1	3		
	TOTAL:	**15**		

Course Code	Course Title	Units	Pre-requisite	Co-requisite
GELECT1	General Education Elective 1	3		
	TOTAL:	**15**		
Term 7				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
ISELEC2	Information Systems Elective 2	3		
ISRSRCH	Applied Learning Research	3		
ISSTRMA	Information Systems Strategy, Management and Acquisition	3		
ISQUANT	Quantitative Methods	3		
GELECT2	General Education Elective 2	3		
	TOTAL:	**15**		
Term 8				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
ISELEC3	Information Systems Elective 3	3		
ISPROJ1	Information Systems Project 1	3	ISRSRCH	
SOFTEST	Principles of Software Testing	3		
IETHICS	Ethics	3		
GELECT3	General Education Elective 3	3		
	TOTAL:	**15**		
Term 9				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
ISELEC4	Information Systems Elective 4	3		
ISPROJ2	Information Systems Project 2	3	ISPROJ1	
MARFRET	Marriage and Family	3		
CSBGRAD	College of Saint Benilde Graduating Students	1	CSBLIFE	
	TOTAL:	**9(1)**		
Term 10				
Course Code	**Course Title**	**Units**	**Pre-requisite**	**Co-requisite**
ISPRACT	Practicum for Information Systems	6		
	TOTAL:	**6**		

CURRICULUM MAP

	IT Education Common Courses	PO1	PO2	PO3	PO4
1.	Introduction to Computing (INCOMPU)	✔	✔		✔
2.	Computer Programming 1 (ISPRGG1)		✔		✔
3.	Computer Programming 2 (ISPRGG2)		✔	✔	✔
4.	Data Structures and Algorithms (DSTALGO)		✔		✔
5.	Application Development and Emerging Technologies (APPDAET)		✔		✔
6.	Information Management (ISINFOM)	✔	✔	✔	✔

	IS Professional Courses	PO1	PO2	PO3	PO4
1.	Organization and Management Concepts (LEADMGT)			✔	✔
2.	Fundamentals of Information Systems (FUNDSYS)	✔	✔	✔	✔
3.	Financial Management (ISFINMA)	✔		✔	✔
4.	Professional Issues in IS (PROFISS)	✔	✔	✔	✔
5.	Enterprise Development (ENTPROG)		✔		✔
6.	Business Process Management (BUSPROC)			✔	✔
7.	IT Infrastructure and Network Technologies (ITINFNT)		✔		✔
8.	Web Development (WEBDEVT)		✔		✔
9.	Systems Analysis and Design (SYSANDE)	✔			✔

		PO1	PO2	PO3	PO4
10.	Evaluation of Business Performance (BUSEVAL)	✔			✔

		PO1	PO2	PO3	PO4
11.	User Interface / User Experience Design (UIUXDES)		✔		✔
12.	Intermediate Application Development (APPINTR)		✔		✔
13.	Enterprise Architecture for Information Systems (IENTARC)	✔	✔		✔
14.	Mobile Development (MOBDEVT)		✔		✔
15.	Information Systems Project Management (ISPRMGT)			✔	✔

		PO1	PO2	PO3	PO4
16.	Database Management (INFODBM)	✔	✔		✔
17.	Information Systems Strategy, Management and Acquisition (ISSTRMA)	✔		✔	✔
18.	Quantitative Methods (ISQUANT)	✔			✔

19.	Principles of Software Testing (SOFTEST)		✔		✔

	Capstone and Practicum	PO1	PO2	PO3	PO4
1.	Applied Learning Research (ISRSRCH)	✔	✔	✔	✔
2.	Information Systems Project 1 (ISPROJ1)	✔	✔	✔	✔
3.	Information Systems Project 2 (ISPROJ2)	✔	✔	✔	✔
4.	Practicum for Information Systems (ISPRACT)	✔	✔	✔	✔

	IS Elective Courses	PO1	PO2	PO3	PO4
	Information Security Track				
1.	Information Security (INFOSEC)	✔	✔	✔	✔
2.	IT Audit and Controls (ITAUDIT)	✔	✔	✔	✔
3.	Digital Forensics (DIGIFOR)	✔	✔	✔	✔
4.	Secured Programming (SECPROG)	✔	✔	✔	✔
	Data Science Track				
1.	Data Visualization (DATAVIS)	✔	✔	✔	✔
2.	Data Administration and Optimization (DATAOPT)	✔	✔	✔	✔
3.	Cloud Data Mining and Warehousing (DATAMIN)	✔	✔	✔	✔
4.	Machine Learning (MACHINE)	✔	✔	✔	✔
	Software Engineering Track				
1.	Embedded Systems (EMBESYS)	✔	✔	✔	✔
2.	Internet of Things Development (IOTDEVT)	✔	✔	✔	✔
3.	Blockchain Development (BKCHAIN)	✔	✔	✔	✔

| 4. | Rapid Application Development (RAPIDEV) | ✔ | ✔ | ✔ | ✔ |