Bachelor of Science in
Data Science and Artificial Intelligence
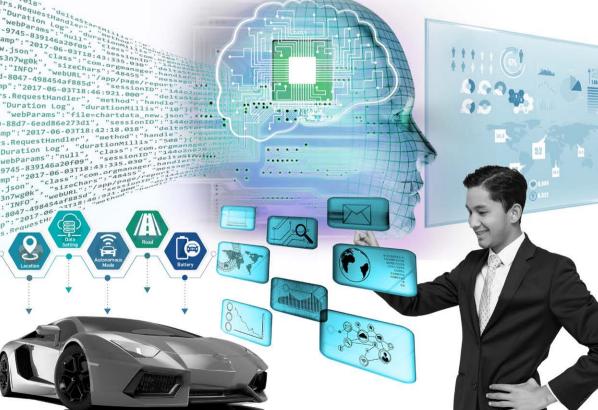## (New programme from AY18/19 onward)

This is a full time four-year direct honours BSc degree programme jointly offered by SCSE and SPMS for students who aspire to master the demands of integrating the synergistic disciplines of computer science and statistics. The programme particularly targets visionary students who have the drive and passion for finding innovative solutions to society's pressing challenges using their knowledge in data science and artificial intelligence (AI). This programme will provide students opportunities to solve real-life problems in different applications domains ranging from science and technology, healthcare and clinical medicine, business and finance, environmental sustainability, etc.

This programme is specifically designed and offered in response to the rapidly developing field of data science and AI that are currently gaining unprecedented traction in the industry as well as in the job market worldwide. As such, there will be rich opportunities for graduating students to work across multiple domains of the digital economy and participate in enhancing Singapore's global competitiveness. The programme hence aims to produce the next generation of highly skilled graduates that are required to continue propel the high-value economy growth of Singapore.

This programme strikes a balance between Computer Science and Mathematical Sciences, which enables it to provide a more comprehensive training in terms of the computing aspects of data science. It is also system-and-product driven in that it covers the essentials in software and product development, and it provides students with a large amount of practical trainings.

LEAD THE CHANGE
INNOVATE THE FUTURE

4-year B.Sci. (Data Science & Artificial Intelligence) Programme
Applicable to students matriculated in 2018 or later

OVERVIEW

Year of Study	Core	Major Prescribed Elective (PE)	General Education Requirement (GER)			Unrestricted Elective (UE)	Total
			Core	Prescribed Elective (PE)			
				BM	LA		
1	19		5	3	3	6	36
2	30		3			3	36
3	16	7	2			6	31
4	11	17	2				30
Total	**76**	**24**	**12**	**3**	**3**	**15**	**133***

* may be subjected to further changes

The degree programme is structured to equip students with the following:

a. A strong foundation in computer science, statistics, and mathematics, through core and elective courses offered by SPMS and SCSE.

b. An integrated application of knowledge in technology and business in the key industries of financial services, tourism-hospitality-retail, government services, healthcare, biotech, and manufacturing, through internships, major applied research project, industry speaker seminar series and mini-projects in the courses.

c. The development of problems-solving, and verbal and written communication skills, through extensive project work and presentations in courses.

d. The development of breadth, creativity, and adaptability, through taking subjects outside the areas of computing and statistics under the General Elective Requirement.

Graduates from this programme can expect to be employed as:

Machine Learning Engineer

Data Scientist

Research Scientist

R&D Engineer

Business Intelligence Developer

Computer Vision Research Engineer

Data Analyst

Data Architect

AI Engineer

AI Scientist

POTENTIAL EMPLOYERS

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