

BACHELOR OF COMPUTER SCIENCE PROGRAMME

INTRODUCTION

Computer science is the scientific and practical approach to computation and its applications. Computer science is a fast-moving field that brings together many disciplines, including mathematics, programming, engineering, the natural sciences and linguistics. We offer a flexible programme with strong fundamental of computer science that provides students the desired skills to solve problems and to create future technology as a computer scientist. The programme is divided into four tracks: Software Technology, Artificial Intelligence, Network and High Performance Computing; which the students will be able to choose in the second year. Apart from the 12-weeks industrial training in the third year, the programme also benefited from hands-on training session conducted by our industry partner such as IBM, CISCO, INFOSys and Prestariang.

OBJECTIVES

This programme aims to produce graduates equipped with the following qualities:

- Possess fundamental knowledge, principles and skills relating to Computer Science.
- Have strong analytical and critical thinking skills to solve problems by applying knowledge, principles and skills relating to Computer Science for lifelong learning.
- Possess and able to apply fundamental mathematical, scientific and theoretical computing knowledge in analysing, modelling, designing, developing and evaluating computing solutions
- Understand the interplay between theory and practice of Computer Science.
- Have communication, teamwork, leadership, interpersonal and entrepreneurial skills, and aware of the social, ethical and legal responsibilities.

LEARNING OUTCOMES

At the end of the programme, students should be able to:

- Demonstrate knowledge of essential facts, concepts, principles, and theories relating to Computer Science.
- Apply computing skills in analyzing, modelling, designing, developing, programming and evaluating efficient computing solutions relating to Computer Science.
- Inculcate skills and social responsibility in developing computing products relating to Computer Science.
- Demonstrate professionalism and social and ethical consideration in accordance with ethical and legal principles relating to Computer Science.
- Demonstrate teamwork, leadership, interpersonal and social skills.
- Utilise relevant techniques and demonstrate analytical and critical thinking skills in problem solving relating to Computer Science.
- Apply skills and principles of lifelong learning in academic and career development relating to Computer Science.
- Apply broad business and real world perspectives daily and demonstrate entrepreneurial skills relating to Computer Science.

Komponen Kursus Course Component	Nama Kursus Course Title	Unit	Taraf
Kursus	Citra Wajib	10	CW
Universiti	Citra Universiti	30	C1-C6
Kursus Wajib	TTTK1114 Pengaturcaraan Komputer	4	WP
Program	TTTR1333 Matematik Diskret	3	WP
	TTTM2033 Teknologi Platform	3	WP
	TTTK1143 Rekabentuk Aturcara & Penyelesaian Masalah	3	WP
	TTTT1964 Pangkalan Data	4	WP
	TTTK2103 Teknologi dan Rangkaian Komputer	3	WP
	TTTU2983 Pangkalan Data Lanjutan	3	WP
	TTTK2023 Kejuruteraan Perisian Berorientasi Objek	3	WP
	TTTC2013 Pengenalan Kecerdasan Buatan	3	WP
	TTTK2093 Interaksi Manusia Komputer	3	WP
	TTTK3163 Pembinaan Pengkompil	3	WP
	TTTK2053 Paradigma Pengaturcaraan	3	WP
	TTTP2543 Pengaturcaraan Web	3	WP
	TTTK4172 Usulan Projek	2	WP
	TTTK4086 Projek	6	WP

Komponen Kursus Course Component	Nama Kursus Course Title	Unit	Taraf
	TTTK3043 Rekabentuk dan Analisis Alkhwarizmi	3	WP
	TTTT4056 Latihan Industri	6	WP
	TTTT4076 Projek Industri	6	WP
Kursus Lengkap Program (LP)	TTTC2453 Pembelajaran Mesin	3	LP
	TTTC2343 Sistem Robot Cerdas	3	LP
	TTTP2043 Fundamental Pemprosesan dan Analitik Teks	3	LP
	TTTK2223 Teori Sains Komputer	3	LP
	TTTK3033 Sistem Pengoperasian	3	LP
	TTTK2133 Komunikasi Data dan Telekomunikasi	3	LP
	TTTN3123 Pensuisan LAN dan Wireless	3	LP
	TTTP2633 Pengkomputeran Bahasa Tabii	3	LP
	TTTP2623 Perwakilan dan Penaakulan Pengetahuan	3	LP
	TTTP3053 Gelintaran Web dan Sistem Pencadang	3	LP
	TTTC3213 Kejuruteraan Data	3	LP
	TTTC3313 Prinsip Sains Data	3	LP

Komponen Kursus Course Component	Nama Kursus Course Title	Unit	Taraf
	TTTK3813 Teknik Pemrosesan Media Digital	3	LP
	TTTC3413 Aplikasi Robot	3	LP
	TTTC2273 Pengkomputeran Lembut	3	LP
	TTTK2323 Pengaturcaraan Mudah Alih	3	LP
	TTTR2013 Pengantar Perhitungan Berangka	3	LP
	TTTN3223 Pengaturcaraan Rangkaian	3	LP
	TTTN3113 Protokol dan Konsep Penghalaan	3	LP
	TTTN3513 Keselamatan Komputer dan Rangkaian	3	LP
	TTTR3343 Sistem Masa Nyata	3	LP
	TTTC3283 Perlombongan Data	3	LP
	TTTP2743 Teknologi Semantik	3	LP
	TTTK4013 Pentadbiran Sistem dan Rangkaian	3	LP
	TTTN4133 Teknologi WAN	3	LP