



TEQSA ID PRV:14323
CRICOS Provider Code: 03866C

BIT312 EMERGING TOPICS IN IT

SYDNEY INSTITUTE OF HIGHER EDUCATION > PROGRAMS > BIT312 EMERGING TOPICS IN IT

Unit Outline

Important Update:	Our aim is to provide you with an optimal learning experience, regardless of how this unit is delivered. Teaching will be delivered in line with the most current COVID Safe health guidelines. This may include a mix of online and face-to-face. Please check the learning management system for announcements and updates. Thank you for your flexibility and commitment to studying with Sydney Institute of Higher Education.
Enrolment Modes:	Year 3, Semester 2.
Credit Point(s):	12.5
EFTSL Value:	0.125
Prerequisites:	Completion of 200CP
Typical study commitment:	Students will on average spend 10 hours per week over the teaching period undertaking the teaching, learning and assessment activities for this unit.
Scheduled learning activities:	4 timetabled hours per week, 6 personal study hours per week.

Unit description

The subject focuses on emerging topics in Information technology. Students will explore how information technology will affect the planet from different perspectives such as poverty, education, globalization, energy management, health, equities, industry, and sustainability. There are many theories regarding technology-enabled business transformation and acceptance of those technologies. Students will gain perspectives on understanding how innovative IT technologies will emerge, generate new revenues and increase demand for IT jobs. The unit will help students stay abreast of emerging Information technologies to determine the impact on the industries and the opportunities for the organisations.

Unit learning outcomes (ULO)

On the successful completion of this unit student will be able to:

ULO1	Propose appropriate methodology for investigation of emerging Information Technologies effects on sustainability.
ULO2	Analyse and evaluate and conceptually map the role of emerging Information technologies in transforming one business domain.
ULO3	Analyse a literature survey of an emerging Information Technology.
ULO4	Analyse, generate, and transmit solutions for the digital transformation in different industries by emerging information technologies.
ULO5	Develop a broad and coherent theoretical knowledge of ethical and sustainability issues impacting the use of technology.

Topics to be included in the unit

1.	Introduction to Emerging Topics in IT
2.	Digital Transformation and related Theories
3.	How Information Technology is affecting the planet: Poverty, Education, Globalization, Energy Management, Health, Equity and Fairness, Sustainability
4.	The role of Data in Information Technology Revolution
5.	Emerging Topics in IT: Data Analytics (Responsible AI, Explainable AI, Informed AI, Generative AI, Data Fabric, Emotion AI)
6.	Emerging Topics in IT: Digital Enterprise (Robotics, Digital Humans, AI-Driven Innovation, Decentralized Finance, Industry Cloud, Light Cargo Delivery Drones, Flying Autonomous Vehicles, Industry4.0)
7.	Emerging Topics in IT: Web Development (Augmented Intelligence, decentralized Web)
8.	Emerging Topics in IT: Networking and Cybersecurity (IOT, Digital Twins, Edge Intelligence, AI PaaS)
9.	Cyber-Privacy and Security
10.	Cloud Technology
11.	Blockchain (Homomorphic Encryption)
12.	Immersive Workplace

Assessment

Assessment Description	Grading and weighting (% total mark for unit)	Due date
Assessment 1: Quiz	20%	Week 5
Assessment 2: Group Presentation	10%	Week 10
Assessment 3: Group Report (Literature Review)	30%	Week 11
Assessment 4: Final Exam	40%	Final exam week