

COURSE TITLE	RESEARCH METHODS IN COMPUTING
Course Code	STA 321
Course Purpose and Objectives	The purpose of this course is to provide students advanced knowledge on the nature and conduct of computing research. The students are encouraged to undertake independent research. Their existing transferable key skills are enhanced. High-order transferable key skills are developed. The students are reminded to follow the Legal, Social, Ethical and Professional (LSEP) principles applicable to the computing industry.
Learning Outcomes	<ol style="list-style-type: none"> 1. Evaluate how established techniques of research are used to extend, create and interpret computing knowledge. 2. Examine complex issues at the forefront of the academic discipline of computing in a systematic and creative manner. 3. Develop self-direction and originality in their research work. 4. Plan and implement solutions in a professional manner. 5. Discuss the LSEP framework.
Course Content	<ul style="list-style-type: none"> • Introduction to Research • Research Methods in Computing • Empirical Research Frameworks • Research Problems • Quantitative Research • Data Collection Techniques • Sampling • Tests • Reviewing • Qualitative Methods • Data Collection Methods • Survey Research • Mixed Methods Research • Research Papers Publication • Essay on Software Engineering Research