SPECIAL TOPICS FOR AUGUST 2020 SEMESTER

Last Update: 26 August 2020

Timetable is subject to changes. Students are required to check the timetable again one week before the commencement of lessons.
Venues with ' ***TBA*** *' will be updated on 2nd week of July 2020.*

^Please refer to the "Course Synopses" from page 2 onwards.

Online Course Registration:
27 Jul 2020 (9am) to 29 Jul 2020 (5pm)

Add/Drop Period:
10 Aug 2020 (9am) to 24 Aug 2020 (5pm)

Programme	Course Code	Course Title^	Academic Unit	Lesson Group	Class Size	Start Date	Class Schedule	Venue	Course Coordinator Details	Online Course Registration Period Course is Offered To	Add/Drop Period Course is Offered To	Remarks
Special Topics	SA830	Writing and Communication Skills for PhD Students	3	Tutorial Group 1	25	13-Aug-20	Thursday, 18:00 - 21:00	NIE2-B1-14 (Seminar Room)	Assoc Prof TANG SIU MEI, RAMONA, ramona.tang@nie.edu.sg	PhD students	PhD students	Compulsory for AY2019 intakes and beyond. Optional for earlier intakes. Pass/Fail. Please refer to Research Student Handbook.
Special Topics	SA994	Theories and Readings in Smart Urbanism	3	Tutorial Group 1	2	13-Aug-20	Friday, 18:00 - 21:00	NIE3-03-131	Assoc Prof Das Diganta Kumar, diganta.das@nie.edu.sg	All research students	All research students	
Special Topics	SC802	Experimental Design and Biostatistics for Biological Sciences	3	Tutorial Group 1	2	14-Aug-20	Friday, 14:30 - 17:30	NIE7-02-32 (Animal Sciences Lab)	Dr Norman Lim T-Lon, norman.lim@nie.edu.sg	NSSE Biology research students (HD by Research)	NSSE Biology research students (HD by Research)	
Special Topics	SE812	Quantitative Research Design And Analysis	3	Tutorial Group 1	20	11-Aug-20	Tuesday, 18:00 - 21:00	NIE2-02-03 (ECL6)	Assoc Prof CHEN WENLI, wenli.chen@nie.edu.sg	All research students	All research students	
Special Topics	SR809	Structural Equation Modeling for Education Research	3	Tutorial Group 1	20	11-Aug-20	Tuesday, 13:00 - 16:00	NIE5-01-TR508	Dr Jose David Munez Mendez, david.munez@nie.edu.sg	All research students	All research students	

Last Update: 26 August 2020

Course Code	Course Title	Description	Academic Unit
SA830	Writing and Communication Skills for PhD Students	This course aims to imrpove the academic writing and oral communication skills of PhD students. Participants will study the discourse and linguistic conventions of academic writing in their own disciplines, and apply this knowledge to the writing of their theses/research papers. In addition to studying the discourse practices of academic writing, participants will examine the thinking processes underlying the formation of those practices. Participants will also learn the structures and processes of effective oral presentations. A range of topics will be explored, including writing different sections of a thesis/research paper; planning and writing research proposals; using language resources for effective writing; conceptualising research writing as argument; giving formal presentations in seminars, conference, PhD oral examinations, and job talks; and communicating ones research effectively to non-experts. The course will be taught by experienced educators of communication skills at NIE. On completion of this course, participants will be able to: - Identify textual conventions valued by the academic discourse communities of their own respective disciplines; - Organise the writing of arguments for academic purposes (e.g., thesis/research paper writing), taking into account the rhetorical goal and expectations of the academic discourse communities in question; - Select linguistic devices to build tectuality and evaluate their compositions for appropriateness to the rhetorical goal and conventions of the genres in question; - Implement the structures and processes of effective oral presentations; and - Achieve confidence in speaking about their own research.	3
SA994	Theories and Readings in Smart Urbanism	This course will introduce the theoretical lenses to understand technology-driven smart urbanism and critically discuss empirical case studies specially chosen from diverse geographies. A broad summary of the course content is as follows: From the Information Society to Smart Cities Evolution and Definition of Smart Cities Smart Cities of the world Provincializing Smart cities From Smart Cities to Smart Nation Smart Technology as an urban way of life: Critical reflections	3
SC802	Experimental Design and Biostatistics for Biological Sciences	Data analysis is crucial to all research projects as it enables an objective assessment of the data collected when investigating the phenomenon of interest. While the field of frequentist statistics is widely used for data analysis in Biology, there is an increasing awareness of some of the limitations involved. This course will provide an overview on the limitations and common misuse of frequentist statistics (e.g., null hypothesis testing, pseudoreplication), before introducing relevant considerations concerning experimental design for biological studies. Participants in this course will learn about alternative analysis approaches, such as model selection using the information-theoretic approach, generalised linear mixed models, ordination, and classification and regression trees, and apply a subset of these approaches in their research theses.	3

Last Update: 26 August 2020

Course Code	Course Title	Description	Academic Unit
SE812	Quantitative Research Design And Analysis	This course covers the concepts, theories and practices associated with the design, measurement, analysis and inference procedures of quantitative educational research. The course addresses a range of topics: The purposes and roles of quantitative research; The generation of research questions/hypotheses; Experiment/non-experimental design and implementation; Survey (including mail, phone, and web-based/ e-mail surveys) sampling, questionnaire, and instrumental design; Data collection, management, exploration, analysis, and presentation; Ethical and diversity issues (confidentiality in handling data, cultural and language issues. Descriptive and inferential statistics will be covered when appropriate, with the focus on conceptual understanding, appropriate selection and utilization of statistical procedures rather than on statistical theory and computation per se.	3
SR809	Structural Equation Modeling for Education Research	This is an introductory course to SEM that is focused on the application and interpretation of statistical models that are designed for the analysis of multivariate data. The SEM is a general framework that allows for the empirical testing of research hypotheses in ways not otherwise possible. It addresses aspects such as longitudinal research, causality, measurement, and mediation. Among others, these aspects are essential in studies looking at how differently students perform over time, which are the predictors of growth, and how such predictors are interrelated.	3