NUS National University of Singapore
Saw Swee Hock School of Public Health

SPECIALISATION IN MODELLING

(EFFECTIVE FROM AY2022/2023 INTAKE, A MINIMUM GRADE OF 'B' FOR ALL SPECIALISATION COURSES AND SPH5005 PRACTICUM IS REQUIRED TO QUALIFY FOR A SPECIALISATION.)

SPECIALISATION IN MODELLING
COMPETENCIES
(a) Evaluate and critique modelling assumptions and findings. (b) Interpret infectious disease epidemiology terminologies and data. (c) Design and implement transmission dynamics models of infectious diseases using common computer languages such as R. (d) Synthesise policy questions into modelling frameworks and translate modelling results to policymakers.
SPECIALISATION CORE COURSES (12 UNITS)
1. SPH5201 Control of Infectious Diseases 2. SPH5421 Fundamentals of Infectious Disease Modelling 3. SPH6101 Advanced Infectious Disease Modelling
SPECIALISATION ELECTIVE COURSES (8 UNITS)
• SPH5105 Advanced Geospatial Methods for Public Health • SPH5205 Urban Outbreak Management • SPH5203 Advanced Epidemiology I **OR** SPH6001 Advanced Epidemiology II • SPH5401 Health Economics and Financing • SPH5406 Contemporary Global Health Issues • SPH6004 Advanced Statistical Learning • SPH6102 Inferential Infectious Disease Modelling

SPH5005 PRACTICUM REQUIREMENTS
The SPH5005 Practicum should involve a modelling study of a public health issue. This could be of an outbreak, an endemic disease, or a methodology for potential outbreaks. The practicum

could also involve a health economic modelling project applied to infectious disease interventions or technologies.