REGULATIONS FOR THE DEGREE OF
MASTER OF SOCIAL SCIENCES
(MSocSc)

(See also General Regulations and Regulations for Taught Postgraduate Curricula)

These regulations apply to candidates admitted to the Master of Social Sciences in the academic year 2024-25 and thereafter.

Any publication based on work approved for a higher degree should contain a reference to the effect that the work was submitted to the University of Hong Kong for the award of the degree.

The degree of Master of Social Sciences (MSocSc) is a postgraduate degree awarded for the satisfactory completion of a prescribed course of study in one of the following fields: Behavioral Health; Clinical Psychology; Counselling; Criminology; Educational Psychology; Gerontology; Media, Culture and Creative Cities; Mental Health; Nonprofit Management; Psychology; Social Data Analytics; Social Service Management; Social Work; and Sustainability Leadership and Governance. These fields of study will not necessarily be offered every year.

Admission requirements

MSS 1.   To be eligible for admission to the courses leading to the degree of Master of Social Sciences, candidates
(a)   shall comply with the General Regulations and the Regulations for Taught Postgraduate Curricula;
(b)   shall hold
    (i)   a Bachelor's degree of this University; or
    (ii)   another qualification of equivalent standard from this University or from another University or comparable institution accepted for this purpose;
(c)   for a candidate who is seeking admission on the basis of a qualification from a university or comparable institution outside Hong Kong of which the language of teaching and/or examination is not English, shall satisfy the University English language requirement applicable to higher degrees as prescribed under General Regulation G2(b);
(d)   shall satisfy any other admission requirements which may be specified for individual fields of study in the regulations below; and
(e)   shall satisfy the examiners in a qualifying examination if required.

MSS 1.1   To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the fields of Behavioral Health, Counselling, Gerontology, Mental Health, Social Service Management and Social Work, candidates shall preferably have had a minimum of two years of post-qualification experience in the relevant fields, in addition to the requirements set out in Regulation MSS 1.

MSS 1.2   To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Clinical Psychology, candidates
(a)   shall hold a Bachelor's degree with a major in Psychology, or a recognized equivalent qualification;
(b)   shall have demonstrated empirical research experience in the form of a dissertation completed in the Bachelor's degree programme or another equivalent programme in psychology, or first-authorship in published journal article;
(c)   shall be eligible for the Graduate Membership of the Hong Kong Psychological Society; and
(d)   shall preferably have relevant working experience,
 in addition to the requirements set out in Regulation MSS 1.

MSS 1.3   To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Criminology, candidates
(a)   shall hold a Bachelor's degree preferably with a major in the social sciences or humanities discipline; or
(b)   shall preferably have working experience in the criminal justice system, social welfare agencies, or in other work with offenders,
in addition to the requirements set out in Regulation MSS 1.

MSS 1.4   To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Educational Psychology, candidates
(a)   shall hold a Bachelor's degree with a major in Psychology, or a recognized equivalent qualification;
(b)   shall be eligible for the Graduate Membership of the Hong Kong Psychological Society; and
(c)   shall preferably have relevant working experience in educational or related settings,
in addition to the requirements set out in Regulation MSS 1.

MSS 1.5   To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Nonprofit Management, candidates shall preferably have three years of relevant working experience, in addition to the requirements set out in Regulation MSS 1.

MSS 1.6   To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Psychology, candidates
(a)   shall preferably have more than one year of work experience; and
(b)   shall satisfy the examiners in a qualifying examination and interview if shortlisted,
in addition to the requirements set out in Regulation MSS 1.

MSS 1.7   To be eligible for admission to the courses leading to the degree of Master of Social Sciences in the field of Social Data Analytics, candidates
(a)   shall preferably have a Bachelor's degree in one of the fields of social sciences: Anthropology, Cognitive Science, Communication, Economics, Education Studies, Ethnic Studies, Linguistics, Political Science, Psychology, Sociology, Urban Studies and Planning, or a closely related field; or a Bachelor's degree in Mathematics, Computer Science, or a related field with an additional major/minor or substantial advanced coursework in one or more social sciences domains; and
(b)   shall preferably have pre-existing training in statistics and/or formal logic or prior experience with one or more technical domains, including programming, statistics, formal logic, calculus, linear algebra, etc.
in addition to the requirements set out in Regulation MSS 1.

MSS 2.   An application for exemption from the above requirements shall be considered on a case by case basis.

Qualifying examination

MSS 3.
(a)   A qualifying examination may be set to test the candidates' formal academic ability or their ability to follow the courses of study prescribed. It shall consist of one or more written papers or their equivalent and may include a project report.
(b)   Candidates who are required to satisfy the examiners in a qualifying examination shall not be permitted to register until they have satisfied the examiners in the examination.

Award of degree

MSS 4.   To be eligible for the award of the degree of Master of Social Sciences, candidates

(a)   shall comply with the General Regulations and the Regulations for Taught Postgraduate Curricula; and

(b)   shall complete the programme as prescribed in the syllabuses and satisfy the examiners in accordance with the regulations set out below.

Period of study

MSS 5.   The curriculum shall normally extend over one academic year of full-time study; or two academic years of part-time study, with a maximum period of registration of two academic years of full-time study or three academic years of part-time study, unless otherwise specified for individual fields of study in the regulations below.

MSS 5.1   In the field of Clinical Psychology, the programme shall normally extend over two academic years of full-time study, with a maximum period of registration of four academic years of full-time study.

MSS 5.2   In the field of Counselling, the programme shall normally extend over two or three academic years of part-time study, with a maximum period of registration of three academic years for the two-year part-time study or four academic years for the three-year part-time study.

MSS 5.3   In the field of Criminology, the programme shall normally extend over one academic year of full-time study or two academic years of part-time study, with a maximum period of registration of two academic years of full-time study or four academic years of part-time study.

MSS 5.4   In the field of Educational Psychology, the programme shall normally extend over two academic years of full-time study or three academic years of part-time study, with a maximum period of registration of four academic years for both full-time and part-time study.

MSS 5.5   In the fields of Media, Culture and Creative Cities, the programme shall normally extend over one academic year of full-time study or two academic years of part-time study, with a maximum period of registration of two academic years of full-time study or four academic years of part-time study.

MSS 5.6   In the field of Nonprofit Management, the programme shall normally extend over one academic year (three semesters) of full-time study or two academic years of part-time study, with a maximum period of registration of two academic years of full-time study or three academic years of part-time study.

MSS 5.7   In the fields of Mental Health, Social Service Management, and Social Work, the programme shall normally extend over two academic years of part-time study, with a maximum period of registration of three academic years of part-time study.

MSS 6.   Candidates shall not be permitted to extend their studies beyond the maximum period of registration specified in the above regulations, unless otherwise permitted or required by the Board of the Faculty.

Advanced Standing

MSS 7.   Advanced Standing may be granted to candidates in recognition of studies completed successfully before admission to the curriculum. Candidates who are awarded Advanced Standing will not be granted any further credit transfer for those studies for which Advanced Standing has been granted. The amount of credits to be granted for Advanced Standing shall be determined by the Board of the Faculty, in accordance with the following principles:

(a)   a candidate may be granted a total of not more than 20% of the total credits normally required under a curriculum for Advanced Standing unless otherwise approved by the Senate; and

(b)   credits granted for Advanced Standing shall not normally be included in the calculation of the GPA unless permitted by the Board of the Faculty but will be recorded on the transcript of the candidate.

Exemption

MSS 8.   Candidates may be exempted, with or without special conditions attached, from the requirement prescribed in the regulations and syllabuses governing the curriculum with the approval of the Board of the Faculty, except in the case of a capstone experience. Approval for exemption of a capstone experience may be granted only by the Senate with good reasons. Candidates who are so exempted must replace the number of exempted credits with courses of the same credit value.

Progression in curriculum

MSS 9.   Candidates may, with the approval of the Board of the Faculty, transfer credits for courses completed at other institutions during their candidature. The number of transferred credits may be recorded in the transcript of the candidate, but the results of courses completed at other institutions shall not be included in the calculation of the GPA. The combined total number of credits to be granted for Advanced Standing and credit transfer shall not exceed half of the total credits normally required under the curricula of the candidates during their candidature at the University.

Completion of curriculum

MSS 10.   To complete the curriculum, candidates
(a)   shall satisfy the requirements prescribed in TPG 6 of the Regulations for Taught Postgraduate Curricula;
(b)   shall follow courses of instruction and complete satisfactorily all prescribed written work and field work;
(c)   shall complete and present a satisfactory dissertation or capstone project as prescribed in the syllabuses; and
(d)   shall satisfy the examiners in all prescribed courses and in any prescribed form of examination.

Dissertation and Capstone project

MSS 11.   Subject to the provisions of Regulation MSS 10(c), the title of the dissertation or capstone project shall be submitted for approval by not later than March 31 of the final academic year in which the teaching programme ends and the dissertation or capstone project shall be presented by a date as prescribed in the syllabuses for each field of study; candidates shall submit a statement that the dissertation or capstone project represents their own work (or in the case of conjoint work, a statement countersigned by their co-worker(s), which show their share of the work) undertaken after registration as candidates for the degree.

Assessment

MSS 12.   Candidates shall be assessed for each of the courses for which they have registered, and assessment may be conducted in any combination of continuous assessment of coursework, written examinations and/or any other assessable activities. Only passed courses will earn credits.

MSS 13.
(a) Where so prescribed in the syllabuses, coursework or a dissertation or a capstone project shall constitute part or whole of the examination for one or more courses.
(b) An assessment of the candidates' coursework during their studies, including completion of written assignments and participation in field work or laboratory work, as the case may be, may be taken into account in determining the candidates' result in each written examination paper; or, where so prescribed in the syllabuses, may constitute the examination of one or more courses.

MSS 14.   Candidates shall not be permitted to repeat a course for which they have received a passing grade for the purpose of upgrading.

MSS 15.   Candidates who have failed to satisfy the examiners at their first attempt in not more than half of the number of courses to be examined, whether by means of written examination papers or coursework assessment, during any of the academic years of study, may be permitted to make up for the failed course(s) in the following manner:
(a) undergoing re-assessment/re-examination in the failed course; or
(b) re-submitting failed coursework, without having to repeat the same course of instruction; or
(c) repeating the failed course by undergoing instruction and satisfying the assessments; or
(d) for elective courses, taking another course in lieu and satisfying the assessment requirements.

MSS 16.   Subject to the provision of Regulation MSS 10(c), candidates who have failed to present a satisfactory dissertation or capstone project may be permitted to submit a new or revised dissertation or capstone project within a specified period.

MSS 17.   Candidates who have failed to satisfy the examiners in any prescribed field work/practical work/internship may be permitted to present themselves for re-examination in field work/practical work/internship within a specified period.

MSS 18.   Candidates who are unable because of their illness to be present at the written examination of any course may apply for permission to present themselves at a supplementary examination of the same course to be held before the beginning of the following academic year. Any such application shall be made on the form prescribed within seven calendar days of the first day of the candidate's absence from any examination. Any supplementary examination shall be part of that academic year's examinations, and the provision made in the regulations for failure at the first attempt shall apply accordingly.

MSS 19.   There shall be no appeal against the results of examinations and all other forms of assessment.

MSS 20.   Candidates who
(a) are not permitted to present themselves for re-assessment/re-examination in any failed course(s) or to repeat the failed course(s) or take another course in lieu under Regulation MSS 15; or
(b) have failed to satisfy the examiners in any course(s) at a second attempt; or
(c) are not permitted to submit a new or revised dissertation or capstone project under Regulation MSS 16; or
(d) have failed to submit a satisfactory new or revised dissertation or capstone project under Regulation MSS 16; or
(e) have exceeded the maximum period of registration.
may be required to discontinue their studies.

MSS 20.1 In the field of Clinical Psychology, candidates who have failed two external placements or the second attempt of either the external placement or internal practicum may be required to discontinue their studies.

MSS 20.2 In the field of Educational Psychology, candidates who have failed any two practicum courses may be required to discontinue their studies.

Grading systems

MSS 21.   Individual courses shall be graded according to the one of the following grading systems:

(a)   Letter grades, their standards and the grade points for assessment as follows:

Grade	Standard	Grade Point
A+		4.3
A	Excellent	4.0
A-		3.7
B+		3.3
B	Good	3.0
B-		2.7
C+		2.3
C	Satisfactory	2.0
C-		1.7
D+		1.3
D	Pass	1.0
F	Fail	0

or

(b)   'Pass' or 'Fail'.

Courses graded according to (b) above shall not be included in the calculation of the GPA.

Classification of awards

MSS 22.   On successful completion of the curriculum, candidates who have shown exceptional merit may be awarded a mark of distinction, and this mark shall be recorded in the candidates' degree diploma.

**SYLLABUSES FOR THE DEGREE OF
MASTER OF SOCIAL SCIENCES**

SOCIAL DATA ANALYTICS

The Faculty of Social Sciences offers a postgraduate programme leading to the degree of Master of Social Sciences in the field of Social Data Analytics. The programme shall extend over not less than one and not more than two academic years of full-time study or not less than two and not more than three academic years of part-time study, inclusive of intervening vacations. All courses are offered on both full-time and part-time basis. Classes are conducted during daytimes, evenings and occasional weekends.

ASSESSMENTS

Candidates are assessed the courses by way of (1) a 2-hour written examination that accounts for 40% of total marks and 60% by coursework assignments or (2) by 100% coursework and may include written tests.

CURRICULUM

Before the commencement of the programme, all candidates must attend a mandatory 18-hour social data analytics boot camp. The boot camp training programme is designed to provide candidates with beginner-level skills in social data analytics so that they can follow the more advanced curriculum for the degree of Master of Social Sciences in the field of Social Data Analytics. The boot camp will be taught over three to four days, organised around the following topics:

1. Welcome to the Boot Camp in Social Data Analytics: pedagogical approach, how to get started; an introduction to open-source software R and Rstudio and how to customize your interface
2. Introductory/refresher course in algebra, probability and statistics
3. Using objects (e.g. vectors and dataframes) and different classes of objects (e.g. numeric vs. string) in R-Studio
4. How to clean, reshape, and restructure data with the tidyverse
5. Data Visualization with ggplot
6. Basic Programming: write functions, loops, and learn how to debug your code
7. Communicating and Collaborating with RMarkdown, Rpres, Shiny and Github

To receive the award of the degree of Master of Social Sciences in the field of Social Data Analytics, candidates have to complete 8 courses (6 credits each) and a capstone project (12 credits), with a total of 60 credits. The compulsory courses provide candidates with a broad, integrated understanding of the social sciences approach to data science and data analytics. The elective courses, building upon that foundation, introduce the candidates to a variety of developments in computational social sciences methods.

Candidates shall complete <u>all</u> compulsory courses of the following list:

MSDA7001. Introduction to social data analytics (6 credits)
MSDA7002. Statistical foundations (6 credits)
MSDA7003. Machine learning (6 credits)
MSDA7004. Research design and inference in the social sciences (6 credits)
MSDA7005. Programming for social scientists (6 credits)

Candidates shall complete <u>at least two</u> of the following elective courses:

MSDA7101. Big data solutions to social problems (6 credits)
MSDA7102. Simulating human behaviours with agent-based models (6 credits)
MSDA7103. Text as data: Natural language processing and social research (6 credits)
MSDA7104. Social network analysis (6 credits)
MSDA7105. Media data analysis (6 credits)

One additional elective course can also be taken from other programmes:

GEOG7308. Machine learning for geospatial data (6 credits)
GEOG7310. Cloud computing for geospatial data analytics (6 credits)
GEOG7311. Web GIS (6 credits)
MSBH7005. Scientific inquiry and research methods in behavioral health (6 credits)
SOCI7006.   Research methods in media, culture and creative cities (6 credits)
SOWK6185. Qualitative research methods (6 credits)

and to complete the following capstone experience course:

MSDA8001. Capstone project (12 credits)

There are no prerequisites of all compulsory or elective courses. Not all the courses listed will necessarily be offered every year. While we try to ensure as broad a course offering to students as possible, courses offered each year do vary based on availability of teaching staff, departmental resources and student demand. In exceptional instances, it may be necessary to cancel a course at short notice because of insufficient student enrolment or other resource issues.

Course Descriptions

Compulsory Courses

MSDA7001. Introduction to social data analytics (6 credits)

This course aims to help students make sense of "big data." It guides students to ask and answer the following questions: What are big data? With big data, what questions can policymakers and researchers ask and answer? How to collect and analyze big data? This course introduces students to basic data science techniques and demonstrate how they can be applied to various formats of social data. Upon completion, students are expected to master basic concepts of data science and acquire hands-on experience with social data analytics.
Assessment: 100% coursework

MSDA7002. Statistical foundations (6 credits)

It is quite common for social scientists to use mathematical and statistical techniques to describe and analyse social phenomena. Mathematics and statistics provide the foundations for empirical propositions about relationships between social variables. Social scientists typically transform raw data from the real world into numerical generalisations using statistics. The role of mathematics in social science, though, is not restricted to the domain of statistical technique. Many social scientists also construct mathematical representations of social institutions to understand how they work. Building these formal model entails picking out the most important aspects of a situation and then trying to express them mathematically. Over the years, though, the mathematical demands of modern social science has scaled up considerably.
Assessment: 100% coursework

MSDA7003. Machine learning (6 credits)

This course explores machine learning as the algorithmic approach to learning from data. The course also covers key aspects of data mining, which is understood as the application of machine learning tools to obtain insight from data. Algorithms are placed in the context of their theoretical foundations in order to understand their derivation and correct application. Topics include linear models for regression and classification, local methods (nearest neighbor), neural networks, tree learning, kernel machines, unsupervised learning, ensemble learning, computational and statistical learning theory, and Bayesian learning. To expand and extend the development of theory and algorithms presented in lectures, practical applications will be given in tutorials and programming tasks during the project.
Assessment: 100% coursework

MSDA7004. Research design and inference in the social sciences (6 credits)

This course introduces key methodological concepts and practices in the social sciences. It is especially useful to students without any background in the social sciences, but will also enable students with a background in the social sciences to develop their methodological practice and skills. The key aim of the course is to get students to develop a social science research proposal and to plan the research project successfully. The course is based around three broad topics: (i) philosophy of social science; (ii) research methodology, ethics and practical research strategies; and (iii) research design, with an emphasis on comparative and longitudinal research, and causal inference.
Assessment: 100% coursework

MSDA7005. Programming for social scientists (6 credits)

The course provides an introduction to the basic computational tools, skills, and methods used in Computational Social Science using Python. Python is the most popular programming language for data science, used widely in both academia and the industry. Students will learn to use common workflow and collaboration tools, design, write, and debug simple computer programs, and manage, summarize, and visualize data with common Python libraries. The course will employ interactive tutorials and hands-on exercises using real social data. Participants will work independently and in groups with guidance and support from the lecturers. The practical exercises are designed to demand more autonomy and initiative as the course progresses, culminating in an open-ended group project.
This is an introductory course and no prior experience with programming is required. A basic understanding of statistics and some scripting experience (e.g., from building web pages or statistical analysis programs such as R or Stata) will be helpful but not needed.
Assessment: 100% coursework

Elective Courses

MSDA7101. Big data solutions to social problems (6 credits)

Do Google and Facebook understand us better than we do ourselves? Are we becoming lab rats every time we go online? Is the impartially designed algorithm for predicting the probability of recidivism truly fair for sentencing individuals? What are the ethical issues underpinning big data science? When big data analytics are routinely applied in our daily lives, the ability to audit the adopted algorithms becomes crucial. This course aims to build students' big data literacy through three major areas of focus: (1) Defining what big data is; (2) Providing an overview of existing big data analytical techniques; and (3) Discussing opportunities and challenges of big data analytics in tackling social problems.

The course will focus on elaborating the core principles of a variety of techniques adopted when predicting future phenomena through the lens of big data. We will use a case study approach to provide an in-depth understanding of various big data analytics, with the goal inspiring the students to think creatively and critically about how big data analytics can be used to making scientific discoveries and do social good.
Assessment: 100% coursework

MSDA7102. Simulating human behaviours with agent-based models (6 credits)

Despite its contributions to scientific development, traditional positivist, quantitative approaches (e.g., traditional variable-based statistical equations) have often been criticised for their over-simplification and decontextualisation of real-world phenomena in analysis. In contrast, systems science aims to

understand complex relationships and their adaptive interactions among various elements within varying environments and systems. Systems science has been instrumental in breaking new scientific ground in diverse fields, including but not limited to engineering, decision analysis, transportation, public health, and urban sciences.

This course will pursue a solid understanding of systems science by exploring the latest advances in agent-based modelling (ABM) and the related analysis methods. ABM, a class of systems science, is an in-silico modelling to examine and predict 'what-if' conditions by simulating social behaviours and interactions among individual entities embedded in social structures.

This course is designed to introduce students to basic tools of theory building and data analysis in ABM to apply those tools to better understand social problems in human populations. Students will learn to use agent-based modelling on standard (free) software, paying attention to feedback processes, multilevel interactions, and the phenomenon of emergence. You will enrich your understanding of the problems people have when they share and cooperate, and examine essential models that can support you in your future career in social sciences and beyond.

This course is designed for anyone interested in understanding human behaviours, especially when sharing and cooperation are involved. It will be particularly useful for professionals dealing with challenges related to
public goods, common resources, and cooperation. If you are studying social sciences and are curious about how a computational approach works, this course will be particularly helpful.
Assessment: 100% coursework

MSDA7103. Text as data: Natural language processing and social research (6 credits)

From historical archive to social media discourse, text data are among the most widely available format of social data. Natural Language Processing (NLP) tools help social analysts to use large volume of text to understand social phenomena. This course gives an overview of NLP methods from social sciences' perspective. It discusses how to use NLP tools to discover interesting patterns, create reliable measurement, and make robust inference. It also introduces state-of-the-art generative language models and discusses their promises, limitations, and threats for social data analytics.
Assessment: 100% coursework

MSDA7104. Social network analysis (6 credits)

The basic premise of this course is that the social world is relational. We can not ignore that we are influenced by people we know, have met and respect; ideas and allegiances are formed and maintained in social settings and organisations; not all people have equal opportunities when it comes to finding a job; we communicate over networks, be they online or offline; etc. In this course we aim to produce a detailed understanding of the web of social contacts that structure our daily life and society. We will consider the network both as an object that is interesting in its own right and as something that creates co-dependencies between social units in terms of outcomes and properties of these social units themselves.

The overarching goal of the course is to provide us with tools that bridge theories on the one hand, and what we can actually observe in observational and archival empirics on the other. Put another way, we aim to avail ourselves of approaches that permits us to test if our theoretical ideas about social interaction are supported by what people, organisations and countries actually do. The course is structured around a collection of themes based on such theoretical concepts such as cohesion, embeddedness, homophily, transitivity, the Mathew effect, structural holes, influence, selection. We will examine these both from the perspective of how they structure the network and how these network

effects structure behaviour, opinions and beliefs.

For the purposes of getting some practical understanding of the approaches presented, we will also explore analytic methods using block models, stochastic actor-oriented models, exponential random graph models, network autocorrelation and network effects models. It is not expected that the students become expert users in any of these methods but to appreciate the common goal across these models, namely to model and take into account the interdependencies. Data will mostly be handled in R but orientation to other analysis packages will be given.
Assessment: 100% coursework

MSDA7105. Media data analysis (6 credits)

This course is designed to train students to familiarize a list of essential techniques for media data and social media analytics. It covers a variety of tools that help the learner conduct a range of applications independently, including web scraping, API programming, natural language processing, sentiment analysis, network analysis, digital map, web app development, as well as data visualization. The course is designed and taught in problem-based or project-driven mode which aims to facilitate real life applications in a variety of scenarios in social data analysis.
Assessment: 100% coursework

Additional elective courses can be taken from other programmes

GEOG7308. Machine learning for geospatial data (6 credits)

This course provides an in-depth understanding of machine learning algorithms and techniques for geospatial data analysis. The course covers the fundamentals of machine learning and its application in geospatial data analysis, including feature extraction, data preprocessing, and model selection. It also covers various machine learning algorithms, such as random forest and neural networks, and their application in geospatial data analysis. The course provides hands-on experience with real-world geospatial datasets and tools, such as Python and its relevant libraries, and Google Earth Engine. Upon completion of the course, students will have the skills and knowledge to apply machine learning algorithms to geospatial data analysis and solve real-world problems.
Assessment: 100% coursework

GEOG7310. Cloud computing for geospatial data analytics (6 credits)

This course provides an in-depth exploration of cloud computing with a focus on geospatial data analytics. Students will learn about cloud computing concepts, platforms, and services, and how they can be used to manage and analyze large geospatial datasets. Topics covered include cloud architecture, data storage and retrieval, processing and analysis, and visualization. Students will also gain hands-on experience with cloud-based tools and technologies, and develop skills for building and deploying cloud-based geospatial data applications.
Assessment: 100% coursework

GEOG7311. Web GIS (6 credits)

This course is designed to: (1) introduce the concepts and theories that are related to an increasingly important technology – Internet/Web GIS; (2) introduce various technologies or techniques for creating, analyzing, and disseminating GIS data and services via the Internet. The topics covered include the

hardware/software structure of the Internet (e.g., server-client model, TCP/IP protocol), the evolution of Web GIS, and most importantly, different technology options. Students will be required to practice almost all of the Web GIS tools including Google Map API, ArcGIS Server, JavaScript API, GeoJSON, Mapbox, and Leaflet. Students will also be exposed to the experience of working with the cloud environment such as AWS EC2 and ArcGIS Online.
Assessment: 100% coursework

MSBH7005. Scientific inquiry and research methods in behavioral health (6 credits)

This course covers the nature and logic of scientific inquiry, and fundamental concepts like truth, reality, knowledge, and theory. Basic quantitative and qualitative research methods are covered; advanced research methods and specific approaches in behavioral health i.e., biofeedback, use of images and movement in research etc. will also be introduced. Students will learn to be critical consumers of the scientific literature. Towards the end of the course, students are required to prepare a research proposal in which classroom learning can be applied to practical examples in behavioral health.
Assessment: 100% coursework

SOCI7006. Research methods in media, culture and creative cities (6 credits)

This course offers you the chance to look at different ways of researching media, culture, and creative cities through a range of disciplines, most notably sociology, anthropology, and media and cultural studies. It examines the whole research process, starting from research methodology, to research design, sampling and methods used, to data collection, data analysis and report writing. In particular, various methods will be introduced such as survey, content analysis, ethnography, in-depth interview, life history, reception studies, textual analysis, and deconstruction. Key debates in research methodology such as representation, legitimation, and reflexivity will be discussed. Students will learn the methods for analyzing the media, cultural industries and their products, studying audiences and consumers, charting broader cultural trends, and examining the cultural environment of creative cities. The course helps students put theory "to work" and trains students to become independent researchers who are well-informed at both the theoretical and methodological level.
Assessment: 100% coursework

SOWK6185. Qualitative research methods (6 credits)

This course is designed for students with an interest in understanding all aspects of social life and social relations especially those who will undertake a dissertation study. Starting with the question what is reality, the course begins with an introduction to different perspectives on approaching reality, followed by an assessment of the general strengths and weaknesses of qualitative research in comparison with other conventions such as quantitative surveys. The lectures will focus on introducing the general process of ethnographic research and the variety of methods for data collection and analysis including ethnography, grounded theory, observation, interviewing, focus groups and narrative analysis, etc. Various cases will be used to demonstrate how qualitative research helps make meaningful policy and social work practice. Seminars will be organized around practical methodological issues with the objective of helping students proceed with their own research projects. Hands-on experience of a range of research techniques will also be provided.
Assessment: 100% coursework

Capstone Experience Course (Compulsory)

MSDA8001. Capstone project (12 credits)

This course aims to teach students how to integrate and apply the knowledge and skills they acquired through the programme. Students will conduct a research project in close collaboration with supervisors from the programme. Students will articulate their research objectives, conduct a relevant literature review and develop indicative methodology. The course provides students with the opportunity to undertake a major piece of supported independent research. It is an opportunity to apply skills and techniques learned during the taught component of this programme to a substantive original research or industry focused problem of interest to the student. Projects will be supervised by academic staff affiliated with the Social Data Analytics programme.

Individual projects and research questions are chosen and formulated by students, and supported during the research process by one-to-one or small group meetings with a nominated member of academic staff, and student-led group meetings to seek peer support. The project may address a methodological or practical issue using desk based research and secondary data sources or may involve primary data collection. It may also be carried out in conjunction with an external organisation (such as local government, a charitable organisation or a commercial organisation) in order to address a relevant research or practical issue of interest to them, and making use of their data or other input. Regardless of the nature of the project itself, all projects must have a clearly defined aim and set of specific objectives that are novel or original and which relate to this programme of study. All projects should be written up as an academic piece of work, using the guidance provided during the module.
Assessment: 100% coursework