MSc in Advanced Computer Science and IT Management

Dr Goran Nenadic
Programme Director

Office: Kilburn 2.48
Information, information, information

- You have received a lot of information today
  - And there is more to come

- This session
  - My role in your MSc
  - Programme structure
  - Mitigating circumstances
  - Select student representatives
  - What next?

- But you are studying IT management
Welcome to Manchester

- Manchester is vibrant and nice city

- **But** be careful: the rate of crime is relatively high
  - and in particular in the student areas
  - and in particular in the early days of Semester 1
  - and in particular during certain times

- Welcome week activities around the city
Your MSc programme

- MSc in Advanced Computer Science and IT Management

- Run by the School of Computer Science in collaboration with Manchester Business School (MBS)

- But, your degree is managed/awarded by SCS
  - this is a Computer Science MSc and general SCS rules apply
  - but MBS courses run under MBS rules (see later)
Your Programme Director

- Dr Goran Nenadic
  - Reader in Text Analytics
  - With Manchester since 2004.
  - Teaching: Linked Data, Research Methods
  - Research: text analytics, natural language processing, data mining
    (http://gnode1.mib.man.ac.uk/)

Contact

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Please call me Goran
My role in your MSc

Ensure that your studies run as smoothly and efficiently as possible

• Help with academic choices and decisions
  – e.g. selection/changes of themes, modules – you will need my approval

• Help when things are not working out
  – Personal problems that (may) affect your studies
  – Escalated problems with any units/projects
  – Mitigating circumstances

• General management of the ACSwITM programme
  – e.g. ensure that all rules are followed (and explain them), check that you have enough credits to get the degree, etc.
Other people involved in your MSc

• **Course lecturers**
  - First point of contact for any issues regarding the course
  - E.g. course materials, lab/coursework extensions, explanation of lab/coursework marks

• **Your project supervisor**
  - You will spend half of your programme with your supervisor
  - They will advise and help with your project which is worth half of your degree
  - Your personal tutor from the moment the project starts
  - First point of contact for any issues with your project

• **Director of Post-Graduate Teaching (Norman)**
  - General management of all PG teaching
  - The (almost) final instance in any issues
Other people involved in your MSc

- **Student Support Office** (SSO – based in Kilburn, LF21)
  - Provides advise and adminstrative support for timetables, attendance, registration, locations, timing of exams, assessment, changing units, university services, disability support
  - Submissions of course work and dissertation
  - Forms and paperwork (illness, interruption, etc)
  - First point of contact for anything else

- **MBS Post-graduate Taught (PGT) Office**
  (in the Dover Street building, room G0.17)
  - Submissions of course work for MBS units
  - Forms and paperwork for MBS units
  - First point of contact for anything else related to MBS
Other people involved in your MSc

- **University support**
  - e.g. Career services, Counselling, Legal team, Health, etc.

- **It is always a good idea to contact SSO first and ask if they can help. If they cannot help, they will always know who to contact next.**

- **External Examiner**
  - An independent expert who is external to our University and who oversees the running of the whole programme
  - Currently, Dr Valentina Tamma (University of Liverpool)
Contact me for the following

- Organisation/running of the MSc programme
  - If SSO tells you to contact me (i.e. they can’t resolve it)
- Personal issues that may affect your study
  - related to your personal & family life, health, etc.
  - if you have some circumstance to be taken in to consideration when marking your exams
  
  complete a mitigating circumstances form in time
  - All information provided for mitigating circumstances is treated in the strictest confidence.
  - Don't be late with it!
- Anything else that (may) affect your study and is not resolved by first points of contact
  - e.g. dysfunctional relation with your supervisor/course lecturer
Your MSc programme – overview

- **3 modules from Computer Science** (3 * 15 credits)
  - 2 course units in Semester 1: follow one *theme*
  - select another course unit in Semester 2

- **3 modules from MBS** (3 * 15 credits)
  - choice from eleven (subject to timetabling constraints)
  - 2 course units in Semester 1, 1 in Semester 2

- **MSc project** (90 credits)
  - half of your degree
  - dissertation due in early September (date to be confirmed)
Courses

- A CS course runs in one **period** (five weeks), one day per week
  - two periods per semester (P1, P2, P3, P4)
- An MBS course runs for the full semester, ~half day per week
- Attendance is **compulsory**
  - slide hand-outs won’t give you the same insight
  - full picture, details, important points, etc. only in lecture
- Attendance is **monitored for full 12 months**
  - either through clickers, or signatures on roster
  - if you have to miss classes, let lecturers know
Your MSc year (in principle)

**Semester 1**
- **Period 1**: T1 CS1, MBS C1, MBS C2
- **Period 2**: T1 CS2

**Semester 2**
- **Period 3**: T3 CS1, MBS C3, Project
- **Period 4**: Exams

**Welcome Week**
- Project
Your MSc programme – Semester 1

In Semester 1, choose from

- **One CS theme, from:**
  - Data on the Web
  - Security
  - Software Engineering
  - Data Engineering and Systems Governance
  - Learning from Data
  - Parallel Computing in the Multi-core Era

- **One MBS theme, from**
  - IT management 1
Your MSc programme – Semester 1

Alternative:

- **Pathway**
  - Information management
MBS courses – semester 1

- IT management 1 theme:
  - Managing projects
  - IS Strategy and Enterprise Systems
  - Social Media and Web Analytics
  - Decision Behaviour, Analysis and Support
  - Games Businesses Play
  - Mathematical Programming and Optimisation
  - Entrepreneurial Commercialisation of Knowledge

Choose two of these
(check the timetables)
Tuesday 12:00-13:00
Introduction to themes/options

- Data on the Web      Wednesday 9:00–9:30
- Data Engineering and System Governance
- Learning from Data   Wednesday 11:00–11:30
- Security            Tuesday 10:30–11:00
- Software Engineering
- Parallel Computing in the Multi-Core Era
- Business courses    Tuesday 12:00–13:00
Data on the Web theme

- **CS modules**
  - Modelling Data on the Web
  - Querying Data on the Web

- **MBS options (Semester 1):**
  - Social Media and Web Analytics
  - Mathematical Programming and Optimisation
  - Entrepreneurial Commercialisation of Knowledge
  - Games Businesses Play
  - Decision Behaviour, Analysis and Support
Data Engineering and System Gov.

- CS modules
  - Data Engineering
  - IT governance

- MBS options (Semester 1):
  - Managing projects
  - IS Strategy and Enterprise Systems
  - Games Businesses Play
  - Decision Behaviour, Analysis and Support
Learning from data theme

- CS modules
  - Foundations of Machine Learning
  - Modelling and Visualisation of High-Dimensional Data

- MBS options (Semester 1):
  - Games Business Play
  - Managing projects
  - IS Strategy and Enterprise Systems
  - Social Media and Web Analytics
  - Mathematical Programming and Optimisation
  - Entrepreneurial Commercialisation of Knowledge
Security theme

• CS modules
  – Cryptography
  – Cyber Security

• MBS options (Semester 1):
  – Managing projects
  – IS Strategy and Enterprise Systems
  – Games Businesses Play
  – Decision Behaviour, Analysis and Support

  – (IT governance?)
Software Engineering theme

- **CS modules**
  - Software Engineering Concepts in Practice
  - Agile and test-driven Development

- **MBS options (Semester 1):**
  - Managing projects
  - IS Strategy and Enterprise Systems
  - Decision Behaviour, Analysis and Support
  - Social Media and Web Analytics
  - Mathematical Programming and Optimisation
  - Entrepreneurial Commercialisation of Knowledge
Parallel Computing theme

• CS modules
  – Parallel Programs and their Performance
  – Designing for Parallelism and Future Multi-core Computing

• MBS options (Semester 1):
  – Managing projects
  – IS Strategy and Enterprise Systems
  – Decision Behaviour, Analysis and Support
  – Social Media and Web Analytics
  – Mathematical Programming and Optimisation
  – Entrepreneurial Commercialisation of Knowledge
Semester 2

- Choose one computer science unit
  - Automated Reasoning and Verification (COMP60332)
  - Component-based Software Development (COMP62532)
  - Mobile and Energy Efficient Systems (COMP61232)
  - Principles of Digital Biology (COMP60532)
  - Text Mining (COMP61332)
  - Computer Vision (COMP61342)
  - Introduction to Health Informatics (COMP60542)
  - Mobile Communications (COMP61242)
  - Ontology Engineering for the Semantic Web (COMP62342)
  - Pattern-based Software Development (COMP62542)

- Choose one MBS unit
MBS courses – semester 2

- Information and Knowledge Management
- Risk, Performance and Decision Analysis
- Simulation and Risk Analysis
- Data Analytics for Business Decision Making
- Business Feasibility Study

Choose one of these
Information management pathway

“Cutting-edge computing for managing and analysing information”

• Need for effective and efficient data/information management and analysis within business, scientific, educational, entertainment and organisational contexts
• This pathway focuses on information capture and usage from “big data”
• Strongly industry motivated
  – IBM 2013 Faculty award for Big Data Engineering
Information management pathway

- Examines the entire information management life cycle, including data strategy, management, design and warehousing, data analytics and information governance.

- This pathway was designed to address specific content and consequently does not allow much flexibility in course unit choice.
Information management pathway

Mandatory units:

- Data engineering (COMP60711)
- Foundations of machine learning (COMP61011)
- IT governance (COMP60721)
- IS strategy and enterprise systems (BMAN60111)
- Information and knowledge management (BMAN71652)
Information management pathway

Optional unit:

- Choose one from the following:
  - Data Analytics for Business Decision Making (BMAN60422)
  - Text mining (COMP61332)
  - Risk, Performance and Decision Analysis (BMAN60092)
  - Simulation and Risk Analysis (BMAN70142)
Information management pathway

Note:
there are more efforts in Period 1 than in other themes
Course syllabi

Carefully check the syllabi for all course units you consider taking

http://studentnet.cs.manchester.ac.uk/pgt/
Advice on course selection

- Choose a theme and MBS courses that make sense for what you wish to learn
  - you should be expanding your knowledge
  - choose carefully

- Think of the kind of project you may wish to undertake
  - find right courses

- Make sure the timetable works!
  - Look at the supplied documents carefully
Advice on course selection

• You have until Friday to make choices

Changes of course units:

• For Period 1 course units:
  - changes are only allowed until end of week 1 – so next Friday 30th September for a good reason!
  - You will need my approval for that

• For Period 2: October 7th (end of week 2)

• For periods 3 and 4: beginning of January 2017
Assessment
Your exams

- Exams are in January and May/June
- You will learn how long each exam is
  - typically 2-3 hours
- Most modules have a combined final mark consisting of exam and coursework
- But some modules are 100% coursework
  - Rarely 100% exam.
Your exams

- Pass mark is 50%
  - failed exams need to be re-sat (only once)
  - only some marks can be compensated (up to 30 credits, when marks are 40-49%)
  - this is strict: 49% is not 50%; 39% is not 40%
  - maximum allowable failure (at the first attempt) is 45 credits (3 courses)

- Failed MSc could lead to a PG diploma or certificate
Coursework

- Most (if not all) courses will have course-work which is marked
  - check individual course units

- Course-work submission dates and deadlines
  - please read your handbook carefully
  - please check with your module leaders/SSO
  - rules might be different for CS and MBS courses
  - deadlines are strict: no late submissions
Coursework – Advanced CS modules

- Penalties for late submission are set by University:
  - Basically, **10 marks** off for every day being late, for the first five days
  - After 5 days, it is set to 0 marks

- Applies to both taught part and project
MSc project
Your MSc project

- Half of your MSc degree
- Normally involves both some research and system development, plus dissertation
- Project selection and allocation
  - Takes place in the first semester
  - Choose from a list of many suggested projects or talk to staff about your ideas or areas of interest.
  - Consider industrial projects
    - exploit any industrial contacts you have
Your MSc project

• The project is yours: you can shape it
  – talk to your supervisor

• It should be your chance to exploit and expand your skills
  – be curious; be inquisitive
  – learn new skills, approaches
• Writing in English
Essay writing skills

- Many courses will be assessed by essay writing, including your dissertation and background report.
- Criteria include:
  - Clarity (writing skills; proof reading);
  - Organisation, flow, structure
  - Originality, insight – putting some of yourself into the work
  - Plagiarism will be detected and is punishable...
- Useful Web site: http://www.humanities.manchester.ac.uk
- See the “Scientific writing” section in the handbook

- Practice speaking English
- English language classes – check the timetable
Malpractice
Academic malpractice

• The School and University are very serious about
  – plagiarism
  – collusion
  – fabrication or falsification of results
• Complete 'Plagiarism and malpractice course'

• Ignorance is no excuse!
  – it may cost you your MSc, so be careful
• Help, support and issues
If there is a problem or you need help

- Finding your way in a new city/country/Uni/continent can be stressful & difficult
  - you might need help to find your way around
- You’ll probably have to work hard -- but that should be an enjoyable experience
- Here to help:
  - Programme Director
  - Student support office (SSO)
  - Lecturers,
  - Counselling service,
  - Student union,
  - http://www.sos.eps.manchester.ac.uk/
Mitigating circumstances

• What is it?
  - A means of informing our examination system of some problem/s you have that may need to be taken into account when considering your assessment.

• When do you use it?
  - If you have a problem that is affecting your work.
  - If you have a problem that may affect your work.

• What should you do?
  - Tell your Programme Director
  - Get a Mitigating Circumstances Form from SSO or online
  - Provide as much evidence as possible with the form
  - Get your Programme Director to sign it.

• Strictly confidential
Requesting extensions

- "I need more time" is not a relevant request
  - wouldn’t be fair to other students

- Health/personal issues
  - failing IT equipment is usually not acceptable either

- For individual course units
  - Speak to the lecturer or SSO first
  - Speak to MBS PGT office and lecturers (for MBS modules)

- For MSc project, speak to Project Coordinator
  - before the deadline – no requests will be granted after it’s passed (unless special mitigating circumstances)
Please talk to me

- As soon as you experience something that might seriously affect your studies, please let me know
  - Personal problems
  - Health issues, including depression, stress, illness
  - Family issues
  - Financial problems
  - Inter-personal problems (e.g. with your supervisor, lecturer, etc.)
- You’d need to tell me about problems BEFORE it is late
  - e.g. BEFORE the deadline or exam.
Attendance

• This is a **12-month** programme
  - So, until next September

• You are expected to be here during this time
  - Check your visa conditions!
  - There are breaks for Christmas and Easter, but otherwise you are expected to be working on your studies
Student representation & feedback

• Is taken seriously and we value it

• Staff-Student Consultative Committee
  - at least one volunteer from the ACS & ITM programme for student representation
  - formal mechanism for complaint, feedback, query, and so on
  - meets three times per year

• Your representatives?
Check online documents

http://studentnet.cs.manchester.ac.uk/pgt/

- **MSc Handbook**
  - general information about your MSc, School
  - project, course units, rules, regulations, responsible people
  - health and safety
  - should and must be read!

- **Supervision standards and expectations**
Check online documents

http://studentnet.cs.manchester.ac.uk/pgt/

- Study and curriculum
  - themes, MSc handbook, syllabi, timetable

- Student services
  - School Student Support Office (sso@cs.man.ac.uk), reporting absence, mitigating circumstances form, help etc.

- Technical support
  - IT support: http://www.itservices.manchester.ac.uk/contacts
  - environment: environ@cs.man.ac.uk

- Resources
  - software, e-learning, exam techniques, ...

- ...

What's next?

- Talks about
  - the five CS pathways on Tuesday and Wednesday
  - MBS courses Tuesday afternoon 12:00 noon
  - See also talks on Semester 2 units!
- Introductory lab sessions (Tuesday)
  - make sure that everything works (emails, accounts, etc)
- Online resources, plagiarism (Thursday)
- English language issues and testing (Thursday)
- Manchester United tour (Friday, ~13:00)
What's next?

- Finalise your course selection by 10:00am on Friday

- This week is your ‘warming up’ period – next week we start with full speed.
Changing programmes

• If you want to move to MSc in Advanced Computer Science
  – You need to talk to Sandra Sampaio

• If you want to move to MSc ACSwITM
  – Need to talk to me
  – Possible BUT ACSwITM is **not** a programme with **no** programming: you will still need to know/learn that!
Contact

please send me an email – this is the best way to contact me quickly

Dr Goran Nenadic
Programme Director

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