

NELSON MANDELA
UNIVERSITY



Faculty of Science

Department of Computing Sciences
Honours Information - 2021

Please read this document carefully and keep it in a safe place — it contains important information that you will need to refer to during the year.

Possession of this document **does not** guarantee your registration (or acceptance) for the honours programme or modules, nor does it guarantee access to the Departmental computer laboratories.

Note to all 2021 Honours Students

1. Compulsory Honours orientation sessions will run online from Wednesday, 10 March to Friday, 12 March.
 - a. All full-time Honours students, as well as part-time Honours students doing their projects, are expected to attend all the scheduled online sessions – you will receive a schedule of the sessions closer to the time.
 - b. Part-time students (not doing their projects) are encouraged to attend the sessions that will be indicated on the schedule.
2. Diarise Friday morning 12 March 2021, as this is when we shall finalise the timetable for the Honours modules.
 - a. Please check your official Nelson Mandela email account closer to the time for details regarding session time.
 - b. **All** prospective Honours students are required to attend this session. Please have a list of your current weekly timetable commitments with you.
3. Liaise with Jean Rademakers about access to the Honours laboratory, should you need access to the lab.

ALL INFORMATION IN THIS DOCUMENT WAS ACCURATE AT THE TIME OF PUBLICATION.

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Members of staff

Since the Technical and Admin Staff will be in the office on a rotational basis, and most of our Academic Staff are working from home during the pandemic, the preferred method of communication will be via email.

Designation	Name & email	Office Phone	Office
Head of Department	Prof Brenda Scholtz	041 504 2079	09 02 11
	Brenda.Scholtz@mandela.ac.za		
Secretary	Ms Terry-Lane Kriel	041 504 2247	09 02 15
	Terry-Lane.Kriel@mandela.ac.za		
Admin Assistant	Mrs Dudu Fani	041 504 2530	09 02 14
	Duduetsang.Fani@mandela.ac.za		
Honours Coordinators	Dr Lynette Barnard	041 504 2859	09 01 01G
	Lynette.Barnard@mandela.ac.za		
	Dr Leda van der Post	041 504 2901	09 02 32
	Leda.vanderPost@mandela.ac.za		
	Dr Dieter Vogts	041 504 2089	09 01 01F
	Dieter.Vogts@mandela.ac.za		
Technical staff	<i>Problems with network, Internet and home folders, general fault reporting</i>		
	Mr Jean Rademakers	041 504 2712	09 02 07
	Jean.Rademakers@mandela.ac.za		
	Mr Jarryd Johnson	041 504 2083	09 02 08
	Jarryd.Johnson@mandela.ac.za		
	<i>Usernames, passwords, paper for lab printers, storage access, email, general fault reporting, Covid-related services (access to labs and associated processes)</i>		
	Mrs Hayley Irvine	041 504 2092	09 02 09
	Hayley.Irvine@mandela.ac.za		
Student Assistant Coordinator	Mrs Hayley Irvine	041 504 2092	09 02 09
	Hayley.Irvine@mandela.ac.za		
Postgraduate Server	Mr Jarryd Johnson	041 504 2083	09 02 08
	Jarryd.Johnson@mandela.ac.za		
Research Equipment Admin	Mrs Mildred Zomba	041 504 2087	09 02 54
	Ntombizanele.Zomba@mandela.ac.za		

Intake into postgraduate programmes

Honours

For the official rules, please refer to the Nelson Mandela University Faculty of Science Prospectus, Rules for the degree Bachelor of Science Honours in Computer Science and Information Systems, Bachelor of Commerce Honours (Computer Science and Information Systems) and Bachelor of Commerce Honours (Information Systems and Accounting / Auditing / Business Management). The last year of first intake for the Accounting and Auditing streams is 2021.

Entrance requirements – BSc Honours / BCom Honours

- a) Bachelor's degree in Computer Science and Information Systems or equivalent.
- b) A weighted average of at least 60% for all third year Computer Science and Information Systems modules.
- c) Passes in modules with outcomes similar to Advanced Programming 3.1 (WRPV301), Advanced Programming 3.2 (WRPV302), Database Systems 3.1 (WRDV301), User Interface Design 3.1 (WUIV302) and Project (WRRV301).

Entrance requirements – BCom IS Honours

- a) Bachelor's degree in Computer Science and Information Systems or equivalent.
- b) A pass mark in Accounting 301 (RV301) or General Accounting 301 (RGV301) and a pass mark in Accounting 302 (RV302) or a mark of at least 55% for General Accounting 302 (RGV302).
- c) A weighted average of at least 60% for Database Systems 3.1 (WRDV301), Project (WRRV301), Management Information Systems 3.1 (WRBV301), Management Information Systems 3.2 (WRBV302), User Interface Design 3.1 (WUIV302), ERP Systems 3.1 (WREV301) and Enterprise Systems Development (WREV312).

OR

- a) Bachelor's degree in Computer Science and Information Systems or equivalent.
- b) A pass mark in Auditing 301 (ROV301) or General Auditing 301 (RGOV301) and a pass mark in Auditing 302 (ROV302) or a mark of at least 55% for General Auditing 302 (RGOV302).
- c) A weighted average of at least 60% for Database Systems 3.1 (WRDV301), Project (WRRV301), Management Information Systems 3.1 (WRBV301), Management Information Systems 3.2 (WRBV302), User Interface Design 3.1 (WUIV302), ERP Systems 3.1 (WREV301) and Enterprise Systems Development (WREV312).

OR

- a) Bachelor's degree in Computer Science and Information Systems or equivalent.
- b) An average mark of at least 60% for the third-year Business Management modules.
- c) A weighted average of at least 60% for Database Systems 3.1 (WRDV301), Project (WRRV301), Management Information Systems 3.1 (WRBV301), Management Information Systems 3.2 (WRBV302), User Interface Design 3.1 (WUIV302), ERP Systems 3.1 (WREV301) and Enterprise Systems Development (WREV312).

All these marks should have been achieved in the two years preceding the year of registration for the Honours programme.

Acceptance

Candidates will be selected on their academic performance in the previous academic year. The resources available within the Department are limited and could have implications regarding the allocation of dedicated workspaces and computers.

Minimum requirements for readmission

- Must not have failed Honours modules with a total credit value of more than 33 credits;
- Must not have failed the treatise;
- Must have passed Honours modules with a total credit value of at least 44 credits; and
- In order to register for the treatise, the candidate must have passed Honours modules with a total credit value of at least 66 credits

Refuse readmission to an applicant who fails to satisfy the above minimum requirements for readmission.

Masters

For the official rules, please refer to the Nelson Mandela University Faculty of Science Prospectus, Rules for the degree Master of Science (Computer Science and Information Systems) and Master of Commerce (Computer Science and Information Systems).

Entrance requirements

- a) Honours degree in Computer Science and Information Systems at Nelson Mandela University or equivalent.
- b) A weighted average of at least 60% for all the Honours modules in Computer Science and Information Systems and at least 65% for the Honours project.
- c) Subject to the approval of a project proposal as follows:
 - Project proposals must be approved by the Executive Committee of the Department
 - A project proposal must be submitted timeously to the HoD and must contain the following: Title; Supervisor(s); Overview of the project, preferably with literature references; an outline of the content structure of the envisaged dissertation, research questions and research method.
 - The availability and consent of a suitable supervisor within the Department.

Acceptance

Candidates will be selected on their academic performance in the previous academic year.

Honours modules offered

For the official rules, please refer to the Nelson Mandela University General Prospectus, General Rules for Honours Degrees.

In order to pass the Honours qualification, a candidate must obtain at least 50% for the project and at least 50% in each of a set of modules with a total credit value of at least 88.

The following pages contain a list of postgraduate modules and module descriptions.

2021 Honours Modules

Module (X = core module, Y = semi-core (choose 4), Z = semi-core (choose 1), E = elective module)				Credit value	BSc (CS&IS) Hons	BCom (CS&IS) Hons	BCom IS Hons		
Module Code	Module Name	Sem	Lecturer				IS & Aud	IS & Acct	IS & BM
Choose:					4 Y +3 (Y E)	4 E	2 E	2 E	2 E +1 Z
WHPV400	Honours Treatise/Project	1&2	Assigned Supervisor	32	X	X			
WPAV400	Honours Treatise (Research Paper)	1&2	Assigned Supervisor	36			X		
WPBV400	Honours Treatise (Research Paper)	1&2	Assigned Supervisor	36					X
WPCV400	Honours Treatise (Research Paper)	1&2	Assigned Supervisor	36				X	
WHVV401	IS Project Management	1	Prof André Calitz	11	X	X	X	X	X
WEUV401	Usability Engineering	1	Prof Janet Wesson	11	Y	X	E	E	E
WDWV401	Data Warehousing	1	Mr Nathan Watt (Prof Charmain Cilliers)	11	E	X	E	E	E
WDDV401	Design in the Digital Domain	1	Dr Leda van der Post	11	E	E	E	E	E
WREV402	Electronic Commerce	2	Dr Lynette Barnard	11	E	X	X	X	X
WBIV402	Business Intelligence ¹	2	Prof André Calitz	11		E	X	X	X
WEIM411	Environmental Information Systems	1	Dr Lynette Barnard	11	E	E	E	E	E
WHZV401	Capita Selecta (Multimedia)	2	Dr Dieter Vogts & Dr Leda van der Post	11	E	E	E	E	E
WHAV401	Algorithmics 4 ²	1	Dr MC du Plessis	11		E			
WHUV402	Automata Theory ³	2	Themba Makubalo (Dr MC du Plessis)	11		E			
WHGV401	Computer Graphics		<i>Not offered in 2021</i>	11	Y	E			
WMCV401	Mobile Computing		<i>Not offered in 2021</i>	11	E	E			
WHQV401	Advanced Programming		<i>Not offered in 2021</i>	11	Y	E			
WHWV401	Compiler Construction	2	Prof Jean Greyling	11	Y	E			
WVRV402	Virtual Reality	1	Dr Dieter Vogts	11	Y	E			
WRCV402	Evolutionary Computing	2	Dr MC du Plessis	11	Y	E			
WHAI401	Artificial Intelligence	1	Dr MC du Plessis	11	E	E			
WHYV401	Research Frontiers in Computing	1	<i>Not offered in 2021</i>	11	E	E			
RRO401	Risk-based Auditing	1		15			X		
RIS402	Information Systems Auditing	2		15			X		
RRC400	Corporate Reporting	1&2		30				X	
RFR402	Financial Risk Management	2		10				E	
EBMR420	Business Research (online offering)	1		10					X
EBMH411	Advanced Strategic Management	1		20					Z
EBMJ402	Advanced Financial Management	2		20					Z
EBMG402	(Advanced) Investment Management	2		20					Z
EBMI402	Advanced Strategic Marketing Management	2		20					Z
EBMN410	Entrepreneurship and Small Business Management	1&2		20					Z
Total credits :					120	120	120	120	122

¹ BSc Hons may substitute for another CS module, but must apply.

² May not be taken by those candidates who already have obtained a credit for WRAV301, or similar.

³ May not be taken by those candidates who already have obtained a credit for WRLV301, or similar.

Short description of all Honours modules

Project (WHPV400, WPAV400, WPBV400, WPCV400)

Each candidate will be allocated a project, which must be completed under the supervision of the project supervisor. Furthermore, a project portfolio is to be completed under the guidance of the project supervisor. This will include articles relating to the project, submitted at regular intervals in order to obtain feedback and guidance. The project portfolio will contribute to the final mark for the project.

The Department and / or Faculty of Science reserves the right to incorporate the resulting artefact(s) of the project for internal use at the Nelson Mandela University.

Information Systems Project Management (WHVV401)

This course covers topics such as Information Systems project selection, organisation, planning and control. The management of costs, time, quality, human resources and risks are covered in the course. The course prepares students to write the IT Project Management Professional (PMP) international examination.

Usability Engineering (WEUV401)

This course provides an in-depth knowledge and understanding of the issues involved in the usability evaluation of interactive systems. These include current and next-generation interactive technologies such as the Web, mobile and wearable computing. On successful completion of this course, the student should have gained an understanding of the issues involved in the evaluation of interactive systems. In addition, the student should have gained experience in designing and conducting a formal usability test in the Nelson Mandela University usability laboratory.

Data Warehousing (WDWV401)

Topics covered in Data Warehousing include advanced database issues with an emphasis on the design and management of data warehouses. The concepts and techniques of data mining dominate the module. The module is predominantly workshop driven, with the students taking an active part in the presentation of issues covered. Practical application of the concepts and techniques studied will take place where appropriate.

Design in the Digital Domain (WDDV401)

The main purpose of this module is to develop a sound understanding of design thinking, innovation processes and methodologies specific to digital products and systems by focusing on the vital design stage of the digital design and development process. The module is complementary to modules such as User Interface Design (third year) and Usability Engineering.

There is a strong practical emphasis and the module is conducted in a design studio/workshop environment, enabling students to experience the theoretical concepts studied and develop a personal design practice. While there will be an emphasis on developing creativity, students do not need to be concerned about being “artists” or “designers”, as the focus is on design relevant to computing.

Electronic Commerce (WREV402)

Students study the required infrastructure, support, implementation, management and applications of e-commerce. Security of business transactions, electronic payment systems and business-to-business buying and selling are amongst the topics covered in the course.

Business Intelligence (WBIV402)

This module aims to:

- Enable students to organise enterprise data into a coherent structure
- Equip students to be able to analyse the data in order to make rational decisions.
- Explore and compare concepts and current methodologies for creating On-Line Analytical Processing (OLAP) databases.
- Investigate the development of Key Performance Indicators (KPIs), dashboards and scorecards
- Expose students to hands-on exercises with a business intelligence tool to create, process, browse and secure data cubes of various designs.

Environmental Information Systems (WEIM411)

This module has been introduced because of our collaboration with the University of Oldenburg in Germany and the recent trends in Green IT. Upon completion of the module, a student can expect to be able to:

- Explain the main implementation features of the environmental management principles in the sequences of procurement, production, logistics and marketing
- Analyse the elements of corporate environmental management systems and their implementation concepts
- Discuss the principles of environment performance evaluation
- Have the ability to determine information requirements for the corporate environmental management
- Define and implement IT-supported projects of the corporate environmental protection
- Understand the goal of sustainable development and the role of information and communication technology as an enabler of resource efficiency strategies, environmental and social awareness
- Develop students' understanding of sustainable development as a mega trend,
- Compare the relationship between sustainability and computer science, sustainable information society, and sustainability as a design orientation for environmental management information systems

Capita Selecta (Multimedia Systems) (WHZV401)

Multimedia (MM) is an interdisciplinary field that deals with computer-based systems that create, process, store, present and communicate information digitally in multiple representations. This module focuses on production techniques for MM artefacts and the underlying software and hardware support for MM.

The primary aim of this module is to teach you the knowledge and skills required to know, understand, apply, analyse, evaluate and create simple MM artefacts at an intermediate level, in a collaborative group environment. This module will focus on the making of videos. The topics covered in video making are all relevant to other forms of multimedia and can be easily adapted.

Algorithmics 4 (WHAV401)

The aim of Algorithmics is to study algorithms and create new scientific knowledge about them. The Algorithmics 4 module is intended for those students who are NOT enrolled for a BSc (Hons) degree and may not be taken by those candidates who already have obtained a credit for WRAV301. Algorithmics 4 is presented over one semester and covers the following major topics:

- balanced search trees;
- hashing;
- data with multiple organizations;
- graph theory and applications; and
- indexing and B-trees.

On successful completion of this module, the student will have gained advanced knowledge and skills, in a collaborative group environment, of data structures and their associated algorithms, and their application to problems.

Automata Theory (WHUV402)

The course introduces and defines formal languages and some grammars that generate different classes of languages, e.g. regular, context-free and context-sensitive. Various finite-state and pushdown automata are defined and their properties, applications and relationships with formal languages and grammars are discussed. This module is intended for those students who are NOT enrolled for a BSc (Hons) degree and may not be taken by those candidates who already have obtained a credit for WRLV301.

Computer Graphics (WRHG411/WHGV401)

The Computer Graphics course teaches the basic techniques of computer graphics and how they may be applied. The latest developments of the use of computer graphics for the modelling of complex data and simulation of virtual environments are emphasised. Although the theory of computer graphics is covered, the course has hands-on applied emphasis.

Mobile Computing (WRMC411/WMCV401)

This course provides an in-depth knowledge and understanding of the issues involved in the design and evaluation of mobile applications. On successful completion of this course, the student should have gained an understanding of the issues involved in prototyping and evaluating mobile applications on a mobile platform such as Android or Apple iPhone.

Compiler Construction (WHWV401)

Upon completion of this module, the student will be able to:

- Understand the fundamental topics associated with compiler design and development;
- Demonstrate the conversion of a grammar into LL(1) form;
- Demonstrate the construction of an AST building recursive descent parser;
- Understand and discuss the process of type checking;
- Discuss the generation of native code using a template-based strategy; and
- Contrast the main approaches to code optimization.

Advanced (Functional) Programming (WHQV401)

Functional programming is a programming paradigm that treats computation as the evaluation of mathematical functions. Programming languages are becoming more functional every year. For example, features such as generic programming, type inference, list comprehensions, functions as values, and anonymous types which have traditionally existed as staples of functional programming, have quickly become mainstream features of Java, C#, Delphi and even Fortran. In the future, next generation programming languages will continue to evolve as hybrid functional / imperative programming languages.

Functional programmers can take advantage of immutable data structures to make massively scalable, concurrent applications simple and easy to write. Multithreading is becoming increasingly important with the development of multi-core processors. F# is valuable to programmers at any skill level; it combines best features of functional and object oriented programming styles into a uniquely productive language.

Virtual Reality (WVRV402)

Students will have an understanding of Mixed Reality Environments, of which Virtual Reality is one kind, and practical experience in implementing some of the algorithms and architecture. Upon completion of the

module, students will be able to integrate and manage the vast amounts of multimedia content typically associated with games, interactive eLearning applications and Mixed Reality systems.

Evolutionary Computing (WRCV402)

Students will have an understanding of Neural Networks and practical experience in implementing some of the training algorithms. Genetic Algorithms will be understood and at least implemented on a real world application. The application of Cellular Automata will be understood and implemented.

Artificial Intelligence (WHAI401)

Artificial Intelligence (AI) is an important field within Computer Science. The goal of this course is to expose students to the core established theories in AI to serve as a foundation for understanding and applying AI techniques to challenging real world problems.

Research Frontiers in Computing (WHYV401)

No module currently linked to this code.

For further module information, you may contact the presenting lecturer. Alternately, the presenting lecturers will be introducing their modules during the Honours orientation week, prior to the start of lectures.

Honours projects

Each project candidate will be allocated a project that must be completed under the supervision of the specified project supervisor(s). A project portfolio is to be completed under the guidance of the project supervisor(s).

Details on projects available for implementation will be made available before the initial Honours orientation week and students will be afforded the opportunity to liaise with proposers of projects if they wish to find out more detail regarding the projects, in order to assist with project selection.

General departmental laboratory usage policy

The purpose of this policy is to ensure the acceptable use of the assets (venues, furniture and technology) owned and/or operated, serviced and maintained by the Computing Sciences Department, Nelson Mandela University, by students, staff and visitors. This policy is superseded by the Nelson Mandela University *ICT Usage Policy* and in the event of conflict between the university policy and this document, the university policy will take precedence.

1. The laboratory facilities of the Department can only be used by:
 - A bona fide current student of the University who has, when registering, agreed to the official Nelson Mandela University ICT Usage Policy; and who is registered for one or modules presented within the department;
 - A full- or part time staff member of the department or a staff member from another department that has been granted access to the facilities by one of the technical staff members per the policies related to such access;
 - A visitor to the department that has been granted access to the facilities by one of the technical staff members per the policies related to such access.
2. In order to enter any of the computer laboratories and use any workstation a student must be in possession of a valid student card for the current year. While working on a workstation a student must display his/her student card on the desk at all times. Any student, who does not comply with this rule, will not be allowed

in any of the laboratories. Access to the Honours lab is via post graduate foyer and student cards must be programmed to allow access to the foyer. Requests for access to be loaded on your card must go through one of the technical staff members per the policies related to such access.

3. The use of cellular telephones is not permitted within the Departmental laboratories. Any calls taken outside the laboratories, in the common areas of the department, should not disturb other students or departmental staff.
4. Any misuse of the computer facilities of the Department may result in disciplinary action in terms of the Disciplinary Rules for Students of the Nelson Mandela Metropolitan University or may result in the suspension or cancellation of computer privileges by the Department. Conduct which may result in steps being taken in terms of this shall include the following:
 - Refusing or failing to comply with a lawful instruction or request of any staff member or student assistant of the Department or acting contrary to such instruction or request.
 - Misusing, damaging, destroying or alienating property of the Department by wilful act or negligence, including adjusting of air-conditioning settings, damaging furniture or fittings, stealing or unlawfully appropriating property belonging to the Department, university staff members or fellow students.
 - While in any venue used by the Department, wilfully changing or attempting to alter any hardware or software installation or configuration; improper, unbecoming or disgraceful conduct; smoking, consuming of alcohol, littering, or consuming any form of food or beverages; wasting paper by producing unnecessary or private printouts.
 - Using any of the Department's facilities for purposes other than those required by the course for which he/she is officially registered in the Department, without obtaining the prior consent of the Head of the Department or a person so authorized.
 - Running or attempting to run any form of software other than proprietary software as provided by the Department or as required by an official registered Computing Sciences course.
 - Copying or attempting to copy, in whole or in part, any proprietary software of the Department, in any form, whether electronically or mechanically (including photocopying, recording or any other form of information storage or retrieval).
 - Making proprietary software of the Department or any portion thereof available, in any form, to any third party.
 - Logging on or attempting to log on to a network directory where he/she has no user rights or using or attempting to use a username other than those allocated to him/her.
 - Allowing, intentionally or not, any other person to log on to departmental resources using his/her username and password.
 - Using the Internet for any purpose not explicitly set out in a study guide of an official course of the Department or as instructed by a lecturer of the Department. This includes accessing of any social media sites, including, but not limited to, Facebook, YouTube, Instagram, 9Gag and/or Twitter, unless expressly required by a module for which you are registered.
 - Exceeding the disk space limits for storing general and e-mail files as prescribed by the Department or storing any files in unauthorized locations, or the storage of illegal content such as pirated software or media files.
 - Using or attempting to use the proprietary software of the Department or any portion thereof, for the purpose of completing assignments/projects on behalf of other students.
 - Using or attempting to use the proprietary software of the Department or any portion thereof for the purpose of financial gain.
 - Behaving in any other way that leads or may lead to a situation whereby the process of tuition, research and administration of the Department is or may be prejudiced or imperilled, when such a situation was or could reasonably have been foreseen at the time when such behaviour occurred.

- Deliberately, recklessly, or unlawfully causing disruption to services, degrading the performance of an information system, or jeopardizing the confidentiality, integrity and availability of data networks, computing equipment, systems programs, or other stored information.
- Accessing, viewing or distributing of offensive material, including, but not limited to, pornography or hate speech.

Postgraduate computer resources and laboratory policy

The Department of Computing Sciences has limited computer resources but will endeavour to provide individual computer resources for all registered post-graduate students. Preference will however be given, in order of importance, to PhD, Masters, full-time Honours and part-time Honours students. In the situation where there are insufficient resources, postgraduate students will be expected to share computer resources. Any Honours student not registered for the Honours Project during this year will not necessarily be allowed the exclusive use of computer resources.

While Covid-regulations are in effect that limit access to campus, students who are unable to work remotely and require access to the departmental labs, must follow the procedures below:

- No student or staff member may access campus without a permit issued by Nelson Mandela University management. Should you need a permit, please send an email request to Mrs Hayley Irvine explaining why you are not able to work remotely. This request will be forwarded to the relevant person(s) for consideration under the regulations in place at the time. Should your request be successful, an invitation will be sent to you through the university systems.
- No student may make use of any of the Computing Sciences facilities without a confirmed booking for each required session. If you are in possession of a valid Nelson Mandela University access permit, and wish to use any of the Computing Sciences facilities, you need to send an email to Mrs Hayley Irvine requesting time in the department at least one working day in advance. This request must include the day(s), date(s) and times (start and end) that you need to be in the department and the facilities you wish to use.

1. Individual storage space on network

Please note that no computer games, video or audio files may be stored on the Departmental network unless expressly required for a module for which you are registered. Should any such files be found on the network, these will immediately be deleted. Students are provided with access to cloud storage on Microsoft's OneDrive with limited capacity where module- and project-related work can be saved. Postgraduate students also have access to storage on their local computer hard drive(s).

Installing of software other than departmental proprietary software must only be done with the express approval of the department Network Administrator, Mr Jean Rademakers. If software is needed that is not available through the department or Nelson Mandela University's ICT Services department, licencing for said software will be for the student's account unless payment is approved by the departmental Executive Management team. Requests for this approval must be made via the student's supervisor. Only legal, licenced software may be installed on systems belonging to Nelson Mandela University.

All students are requested to do regular "house-keeping" of their email. This means that items such as Sent items and Deleted items should be cleared on a regular basis.

2. Postgrad Server

The department makes server facilities available to postgraduate students for project-related matters. Any additional project requirements can be requested from the person in charge of the postgraduate server. Please make provision for at least a week when requesting any additional services.

Do **not** install SQL server on your honours machine. It must be accessed from the post-grad server, as your projects are not allowed to be machine specific.

3. Conduct

Please note that any misconduct, for example hacking into another student's computer whether from the laboratory or elsewhere, will be dealt with harshly by the Head of Department and any student suspected of inappropriate conduct will face disciplinary measures.

You are requested to respect the fact that the **postgraduate laboratories are work places** - refrain from entertaining any non-postgraduate students in the postgraduate laboratories. Visits by others cause a disturbance for postgraduate students who are trying to work. You are also to refrain from game playing and watching of and listening to non-study related media in the postgraduate laboratories. Should video or audio material need to be accessed for legitimate purposes, please make use of a headset of sorts to ensure you do not disturb your peers.

You are requested to manage any computer resources granted to you by the Department in a responsible manner. Because of the sensitive nature of the hardware in the postgraduate laboratories, the air conditioners are to be on at all times. Please do not open any windows as this interferes with the functioning of the air conditioners. Please report any malfunctioning equipment to the technical staff as soon as possible.

Any problems with computer resources such as paper jams or non-functional DVD drives are to be reported to the technical staff *immediately*. Under no circumstances are students to attempt to resolve these problems themselves.

Eating and drinking in the labs is prohibited and students are asked to keep their work areas clean and as tidy as possible at all times as visitors may be conducted through the labs at times and as such we need the labs to look respectable. Food and beverages may be consumed within the postgraduate foyer area (currently sponsored by S4), but again you are asked to please ensure that this area is kept neat and tidy at all times.

4. Postgraduate Foyer area

The postgrad foyer area is strictly for the use of postgraduate students. Visitors, whether or not they are Mandela University students, are not permitted in this area and should instead be entertained in the general foyer area. The door to the postgrad foyer area is to be kept secured at all times to ensure the safety of Departmental equipment and postgraduate students' personal belongings.

5. SmartLab and DigiHub

These areas are strictly limited to access by approved students. Anyone wishing to make use of the DigiHub must complete the necessary booking form (available from the technical department) which will be sent to the department HoD for approval. Any postgraduate students wanting access to the SmartLab must apply, via their supervisor, to the department HoD. If such request is granted, card access will be activated on said student's student card.

Student grievances

Grievances are to be made in a written representation to the relevant lecturer. If the matter is not resolved, a written representation can be made to the Head of Department. Again, should the matter not be resolved, a further representation can be made to the Director of School. Again, should the matter not be resolved, a further representation can be made to the Dean of the Faculty.

Bursars and student assistantship

Bursars (bursary holders) are encouraged to refer to the conditions of their bursaries to determine the level of obligatory assistance (often indicated as a specific number of hours) to the Department, without remuneration, that the bursary prescribes. If no specific number of assistance hours is stipulated, but a volunteer requirement is included, then the standard obligation is calculated at 1 hour per R 1,000 received, with a maximum of 90 hours for the year. All bursars are required to provide Mrs Hayley Irvine (contact details below) with the following details **as soon as their bursary details are finalised**, and preferably by **Tuesday, 16 March 2021**:

- Student number
- Full name
- Bursary PROVIDER
- Bursary value
- Total number of assistance hours as specified in the bursary agreement (even if this amount is negligible or zero). Bursary obligations may be associated with the relevant sponsors.

Assistance could take the form of assisting during practical classes, invigilation of tests or with events hosted by the department. Such assistance upholds the Nelson Mandela University Vision 2020 values of Ubuntu, Excellence and Taking Responsibility, and contributes towards the development of the desired 21st century graduate attributes.

While Covid-regulations are in effect that prevent lab-based classes or physical interactions, all assistance will be done remotely, either through the use of MS Teams, or Zoom or over messaging platforms such as WhatsApp or Telegram, at the discretion of the lecturer in charge of any module where you are providing assistance.

Postgraduates who are not obliged by bursary requirements are also welcome to assist the Department, if they would like to do so. Please VOLUNTEER your services. In case you wish to volunteer your time in support of the department and the undergraduate students, please provide Mrs Irvine with the following details:

- Student number
- Full name
- Number of volunteer hours (please specify either PER WEEK, PER SEMESTER or PER YEAR)

Mrs Hayley Irvine is the student assistant co-coordinator. Mrs Irvine will assist you in selecting appropriate weekly slots for assistance on a weekly basis. Please note that commitment to the allocated sessions is binding for the semester unless you make alternative arrangements with Mrs Irvine and/or the relevant module lecturer. Furnish Mrs Irvine with a list of your preferred modules, days and timeslots as per the lab timetable (available from Ms Irvine) by the end of the day on **Tuesday, 16 March 2021**.

All students with bursary obligation hours and those who have volunteered their time will be enrolled on the CS Assistants Moodle page. This page is used to request assistance with invigilation of semester tests in the departmental labs. From time to time, Mrs Irvine will make sessions available on the Moodle page and students can sign up for as many sessions as they like as long as they meet the specified conditions per session. Speedy response to these requests is appreciated. To facilitate the tracking of all hours served, students are required to regularly submit a Tracking Form (Excel based) on a monthly basis. This form is available on the CS Assistants Moodle page and all instructions on how to use the form are explained there. Your first responsibility in serving your obligation hours is to the Computing Sciences department. Should students receive permission from their bursary provider to serve their obligation hours outside of the department, whether in another department of the university or within the larger community, written proof of this VOLUNTARY work from the person(s) for whom the work is done must be supplied to Mrs Hayley Irvine when submitting your tracking form, so that the hours can be recorded as having been served.

Information and Communication Technology Policy

Students are to ensure that they understand the ICT policies of the University and they need to ensure that they adhere to all policies and procedures contained therein.

See <http://my.mandela.ac.za/default.asp?id=308&IRCno=> for a list of all Nelson Mandela University policies. ICT policies are under 900 Facilities and Services:

[-] **900 FACILITIES AND SERVICES**

[-] 901 Information and Communication Technology (ICT)

- 901.01 General ICT Policy
- 901.02 Printing and Imaging Policy
- 901.03 Enterprise Content Management (ECM) Governance Framework

[+] 902 Health and Safety Management and Services

[+] 903 Facilities Management

[+] 904 Library and Information Services

[+] 905 Reprographic Services
