Department of Computer Science & Informatics

Postgraduate Admission Guidelines & Programme Details

2026



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PART A: GENERAL INFORMATION FOR ALL APPLICANTS

A.1 Overview

A.1.1 Purpose of this Document

This information document provides a comprehensive overview of the postgraduate programmes offered by the Department of Computer Science and Informatics (CSI) at the University of the Free State (UFS) for the 2026 academic year. It is intended to guide prospective Honours, Master's, and PhD students through the application and registration processes, while also outlining programme structures, module offerings, admission requirements, and departmental research areas.

The information contained in this document applies to:

- South African and international students
- · Applicants from within and outside the UFS
- Full-time and part-time research students

Students are advised to read the document carefully and ensure that they meet all admission criteria before submitting their applications.

A.1.2 Important Dates and Deadlines

Please take note of the following important dates and deadlines for the 2026 Academic Year:

Description	Deadline / Date
Opening of UFS Online Applications	1 April 2025
Honours Application Deadline	30 September 2025
Master's/PhD Application Review Cycle 1	Applications processed after 30 Sept
Master's/PhD Application Review Cycle 2	Applications processed after 31 March
Honours – Compulsory Information Session (online)	Thursday, 29 January 2026 @ 17h00
Honours – Project Workshop (online)	Monday, 2 February 2026 @ 08h00
Honours – CSIS6813 Block Week (online + in-person session)	3 to 6 February 2026
Honours – Start of Semester 1 Classes	Monday, 9 February 2026
Honours – Registration Deadline	Friday, 6 February 2026

Please adhere strictly to the above deadlines. Late or incomplete applications cannot be considered.

A.1.3 Contact Information

For all general enquiries related to postgraduate programmes:

Programme Director: Postgraduate Coordinator:

Mr Jaco Marais Prof Liezel Nel

Email: csi@ufs.ac.za
Email: nell@ufs.ac.za

A.2 Application Process

A.2.1 Online applications

All applicants (including current UFS students, students from other universities, and international applicants) must apply online via the UFS website: https://apply.ufs.ac.za/

Please ensure the following when applying:

- Complete the online application form in full.
- Upload **all** required supporting documents (e.g., ID/passport, academic records, certificates, proof of qualifications, etc.).
- Indicate the correct qualification and programme code (see **Part C** for Honours, **Part D** for Master's, and **Part E** for PhD).

A.2.2 International applications

International students and students with qualifications from non-South African universities must follow additional steps:

SAQA Evaluation

- An evaluation letter from South African Qualifications Authority (SAQA) is required for all non-South African qualifications. The SAQA assessment must be completed *prior* to applying to the UFS.
- Apply online at: www.saqa.org.za
- o This process can take anything from 2 to 3 months, so apply well in advance.
- Certificate of conduct: Students transferring from other universities must include a
 certificate of conduct as well as a study record from their previous university with their
 applications.
- Certified copies: International postgraduate students must attach certified copies of degrees/certificates to their applications. Degrees/certificates that are not certified will delay the processing of applications.

- Study visa: Once you receive a letter of admission:
 - Apply for a **study permit** at your nearest South African embassy or consulate.
 You will need:
 - Your UFS admission letter.
 - A letter from the Office for International Affairs (UFS).
 - Valid passport.
 - Proof of medical aid (see below).
 - Please be advised that your study permit application can take up to six weeks to be finalised.

Medical Aid:

- All international students must join a South African medical aid scheme registered with the South African Medical Council.
- Hospital plans and travel insurance are not accepted.
- o Visit <u>www.medicalschemes.com</u> for a list of approved providers.

The Office for International Affairs is located in the Mabaleng Building, Bloemfontein campus. Email: internationalenquiries@ufs.ac.za

For application, visa, and immigration enquiries, contact:

Jeanne Niemann: +27 51 401 3219 <u>niemannaja@ufs.ac.za</u>

For scholarships and funding, contact:

Mbali Moiketsi: +27 51 401 3403 MoiketsiMV@ufs.ac.za

A.2.3 Frequently Asked Questions (FAQ)

Q: How will I know if my Honours application was successful?

A: You will receive official communication from the UFS Admissions Office. For Honours applications, final notice of acceptance/rejection of applications can only be given once the final undergraduate marks are available at the end of the academic year.

Q: What if I am still completing my undergraduate degree?

A: You may apply using your most recent academic record. Final acceptance will only be confirmed once your final marks are received.

Q: What is the application deadline for Honours?

A: 30 September 2025 for 2026 Honours intake.

Q: Do you offer online-only or blended-learning Honours programmes?

A: No. All Honours modules are offered in-person only on the Bloemfontein campus.

A.3 Tuition Fees (2026)

For any financial queries regarding tuition fees, please contact:

Tel: +27 51 401 3003 or Email: tuitionfees@ufs.ac.za

For an online quotation, you can also visit: https://kovsielife.ufs.ac.za/quote/quote.aspx

Note: The CSI Department does not handle queries regarding tuition fees.

PART B: APPLICATION & REGISTRATION GUIDELINES FOR MASTER'S & PhD STUDENTS

Master's and PhD applicants should take notice of the following:

- Applicants (including applicants who did not complete their previous degree at the UFS) must apply online via the UFS website (https://apply.ufs.ac.za).
- All relevant documents related to the applicant's previous qualifications (as specified
 in the UFS application form) must be uploaded to accompany the application when it
 reaches the UFS Administration. This includes a SAQA evaluation certificate for nonRSA previous qualifications (NOTE: It is the applicant's own responsibility to request
 this certification beforehand). As soon as the application is complete, Administration
 will send it through to the CSI Department for academic consideration.
- Applications will only be reviewed twice per year: After 30 September and after 31 March.
- Applicants will be selected based on academic merit and available supervision capacity in the prospective departmental research area.
- If the choice of the prospective departmental research area is not clear from the applicant's documentation, the Department may contact the applicant to clarify.
- If the application was unsuccessful (not including incomplete applications), the Department will communicate the reasons and specify what will be expected of the applicant to be successful should re-submitting be an option.
- An applicant will be conditionally accepted if:
 - Application form is complete and correctly filled in;
 - o NQF (SAQA) level of the previous degree is correct;
 - In the case of a module-oriented previous qualification, the study records indicate previous modules on the correct NQF-level, with the majority of modules within Computer Science; and
 - o Minimum average of 65% (Master's) or 65% (PhD) has been met; and
 - The CSI Department has the capacity to accept new students in the specific research area.
- The applicant will be referred to a relevant research area coordinator who will
 evaluate the proposed research idea/topic. Based on the relevancy/potential of the
 proposed idea and the Department's supervision capacity, a decision will be made
 as to whether the applicant will be allowed to register.
- As soon as the student is registered, an official supervisor will be allocated based on the research area and topic. It is the responsibility of the applicant, in collaboration with the allocated supervisor, to prepare a research proposal.

- The proposal should at least address the following: Introduction, Literature review (background), Problem statement, Aim, Research question(s), Hypotheses (if applicable), Research design & methodology, Reliability/Validity or Trustworthiness, Ethical considerations, Contributions/Value of research, Limitations, Timeline, and Budget.
- The proposal must be presented in person or online to the staff of the CSI Department

 within three (3) months of registration for master's students and within six (6) months of registration for PhD students. Note: Final acceptance of a student is subject to acceptance of their proposal.
- After the proposal presentation, the Departmental Postgraduate Committee will make a final decision on whether the student will be allowed to continue with their studies, or whether the registration of the student will be terminated.
- If the student fails to adhere to the relevant time restriction for the proposal presentation, Administration will be notified to terminate the registration.

PART C: HONOURS (2026)

C.1 Honours Degree Codes

Three Honours programmes are presented in our department:

- BC460022: BSc Honours (Computer Science and Informatics)
- BC460095: BSc Honours (Data Science)
- BC460156: BCIS Honours (Computer Information Systems)

C.2 Honours Admission Requirements

The following minimum admission requirements apply for each of the Honours programmes:

- BSc Honours (Computer Science & Informatics CSI) degree:
 - o BSc degree in Computer Science, Informatics, or Information Technology.
 - Minimum of 65% average for the four UFS (or closely related) 3rd-year (NQF 7)
 Computer Science modules. (UFS modules: Database Design, Internet Programming, Networks, and Software Engineering).

BSc Honours (Data Science – DS) degree:

- BSc degree in Data Science.
- Minimum average of 65% for the five UFS (or closely related) 3rd-year (NQF 7)
 Computer Science modules. (UFS modules: Database Design, Internet Programming, Networks, Software Engineering, and Data Science).
- Proficiency in Statistical Inference and Probability Theory, Linear Algebra, Programming, Data Structures, and Databases, as well as foundational Data Science and Machine Learning skills.

BCIS Honours (Bachelor of Computer Information Systems) degree:

- o B or BSc degree in Information Systems or Computer Information Systems.
- Minimum of 65% average for the four UFS (or closely related) 3rd-year (NQF 7)
 BCIS and Computer Science modules. (UFS modules: Database Design, Information Systems in Organisations, Networks, and Software Engineering).
- An average mark of at least 60% for at least six undergraduate Business Management modules, but not less than 55% in each module; of which 64 credits need to be at NQF level 5 and/or NQF level 6 and 32 credits at NQF level 7.

C.3 Full-Time vs. Part-Time

From 2026 onwards, the Honours programmes in the CSI Department will officially be listed in the University Prospectus as *full-time only*, regardless of whether students complete it in one or two years.

Full-time Honours (1-year option):

- Students are expected to complete all coursework and project components within one academic year.
- Compulsory face-to-face class attendance on campus (Mondays to Fridays)
- o This is the standard option for most students.

Full-time Honours (2-year option):

- Students may spread the workload over two years.
- Compulsory face-to-face class attendance on campus (Mondays to Fridays) remains in effect.
- This option is primarily intended for students who are working or have other commitments but can still attend classes in person.

Important:

The Department does **not** offer an online version of the Honours programme. All modules require regular, in-person attendance on the Bloemfontein campus.

Clarification for international applicants (in line with Study Visa requirements):

- A student enrolled in the Honours programme must attend classes **face-to-face on campus**.
- The programme is therefore considered **full-time** for visa and registration purposes.
- Applications from students who intend to study remotely or online cannot be accommodated.

C.4 Duration and Scope of Honours Studies

For an Honours degree, you must complete eight (8) modules in total, comprising of seven (7) modules *plus* the project year module.

You have the choice of completing the degree over one year or two years:

One year:

- Project module (a year module)
- o Four 1st semester modules & three 2nd semester modules.

OR

Three 1st semester modules & four 2nd semester modules.

Two years:

- Spread modules above over 2 years.
- o Select to do the project year module in either 1st or 2nd year.

C.5 Honours Modules 2026

Please refer to Table 1 and Table 2 for an overview of the Honours modules currently planned for presentation in 2026. **Note:** The information provided in these tables is preliminary and subject to change. Final module offerings, schedules, and formats will be confirmed at the start of the academic year.

Table 1: Honours modules for 1st semester of 2026

MODULE	DESCRIPTION		
CSII6833	Human-Computer Interaction		
CSID6853	Data Warehousing		
CSIA6853	Natural Language Processing		
CSIS6813	Introduction to Research		
	(Presented as block session)		
CSIP6833	Advanced Internet Programming		
CSIA6813	Advanced Data Science		
ESEM6814	Strategic Management (BCIS Hons Students only)		
EFMN6814	Financial Management for Managers (BCIS Hons Students only)		

Table 2: Honours modules for 2nd semester of 2026

MODULE	DESCRIPTION
CSID6823	Business Intelligence
CSIP6883	Advanced Programming II
CSIA6843	Analytical Programming (SAS)
CSIE6863	Project Management
CSIC6843	Robotics
EOCC6824	Omni-Channel Commerce (BCIS Hons Students only)
EVEN6824	Venture Creation (BCIS Hons Students only)

For BSc Honours, a maximum of two (2) <u>approved</u> related Honours modules may be taken from other departments within the Faculty of Natural and Agricultural Sciences. These modules must be approved by the Programme Director, Mr Marais. It is, however, the student's own responsibility to make sure that these modules fit into our department's timetable. No changes to our timetable will be made to accommodate other departments' modules.

C.6 Honours Programme Composition for 2026

In 2026, you'll have the following choices in composing your personalised Honours programme:

- BSc Honours (Computer Science and Informatics) degree (BC460022):
 - Compulsory:
 - CSIS6809: Honours Project (36 credit year module)
 - CSIS6813: Introduction to Research
 - Pick six (6) of the available elective modules see Table 3.
- BSc Honours (Data Science) degree (BC460095):
 - Compulsory:
 - CSIS6809: Honours Data Science Project (36 credit year module)
 - CSIS6813: Introduction to Research
 - CSID6853: Data Warehousing
 - CSIA6813: Advanced Data Science
 - CSIA6843: Analytical Programming (SAS)
 - CSID6823: Business Intelligence
 - Pick two (2) of the available elective modules see Table 3.
- BCIS Honours degree (BC460156):
 - Compulsory:
 - BCIS6809: Honours BCIS Project (36 credit year module)
 - CSIS6813: Introduction to Research
 - CSIE6863: IT Project Management
 - From the Faculty of Economic and Management Sciences
 - 1st semester: Choose one of the following
 - EFMN6814: Financial Management for Managers
 - ESEM6814: Strategic Management
 - 2nd semester: Choose one of the following:
 - o EOCC6824: Omni-Channel Commerce
 - EVEN6824: Venture Creation
 - Pick three (3) of the available elective modules see Table 3.

Table 3: Compulsory and elective modules for 2026 Honours Programmes

Module Code	Module Name	Semester	CSI	DS	BCIS	
CSIS6809	Honours Project	Υ	Compulsory	Compulsory	Compulsory	
CSIS6813	Introduction to Research	1	Compulsory	Compulsory	Compulsory	
CSID6853	Data Warehousing	1	Х	Compulsory	х	
CSIA6853	Natural Language Processing	1	х	х		
CSIA6813	Advanced Data Science	1		Compulsory		
CSIP6833	Advanced Internet Programming	1	х	х		
CSII6833	Human-Computer Interaction	1	х	х	х	
EFMN6814	Financial Management for Managers	1			Compulsory	
ESEM6814	Strategic Management	1			(pick one)	
CSID6823	Business Intelligence	2	х	Compulsory		
CSIA6843	Analytical Programming (SAS)	2	х	Compulsory	х	
CSIC6843	Robotics	2	х	х		
CSIE6863	IT Project Management	2	х	х	Compulsory	
CSIP6883	Advanced Programming II	2	х	х	х	
EOCC6824	Omni-Channel Commerce	2			Compulsory	
EVEN6824	Venture Creation	2			(pick one)	
	E	Electives (x):	Pick 6	Pick 2	Pick 3	

C.7 Honours Contact Sessions

C.7.1 Compulsory Honours Information session

A compulsory, **online** information session will be held on **Thursday, 29 January 2026** (@ 17h00) before classes commence. Please note the following:

- The session will take place online via Blackboard Collaborate (BB Collab).
- The session link will be shared with all successful Honours applicants.
- All relevant Honours information will be provided during this session to assist students with their module choices and registration.
- Each lecturer will present a brief overview of their module.
- Attendance of this session is <u>compulsory</u> for first time Honours students.

C.7.2 Honours Project (CSIS6809 / BCIS6809) workshop

The Honours project (CSIS6809/BCIS6809) is a *compulsory* module to obtain your Honours degree. It is presented as a year module. Please note the following regarding this workshop:

- A one-day online Honours Project Workshop will take place on Monday, 2 February 2026, starting at 08h00.
- This session is <u>compulsory</u> for all students who intend to register for their Honours project in 2026. Non-attendance will prevent you from registering, or receiving supervision, for the project.
- This session will be presented online via BB Collab.
- All relevant information pertaining to the Honours project will be explained and discussed.
- Please make the necessary arrangements with your employer well in advance to be able to attend.

C.7.3 CSIS6813 contact sessions

CSIS6813 (Introduction to Research) is a *compulsory* module to obtain your Honours degree.

- The contact sessions for CSIS6813, will take place during a <u>once-off block week</u> in the week following the Honours Information Session, namely **from 3 to 6 February 2026**, **from 08h00 to 17h00 daily**.
- These sessions will be presented online via BB Collab, <u>except</u> for the Friday morning session that will be presented **face-to-face** in the WWG225 laboratory in the Department, on the Bloemfontein campus. This implies that you will have to (physically) be in Bloemfontein on campus on Friday, 6 February 2026 at 08h00. No

exceptions will be made – this session will not be presented online. If you do not attend this session physically, you will receive an incomplete for CSIS6813 and subsequently will have to redo this module in 2027.

- These contact sessions are <u>compulsory</u> if you intend to register for CSIS6813 in 2026 and will not be repeated in 2026. Assignments will also be handed out during these sessions.
- Please make the necessary arrangements with your employer well in advance to attend this week's sessions.

C.7.4 Contact sessions for other Honours modules

The normal contact sessions for the 1st semester Honours modules of 2026 will commence on Monday, 9 February 2026.

Face-to-face attendance of contact sessions for all modules is <u>compulsory</u>. These sessions generally take place on weekdays between 17h10 and 21h00. Depending on the number of modules presented, a module could also be presented between 07h10 and 08h00 in the morning, or from 15h10 to 17h00 in the afternoon.

Due to compulsory face-to-face attendance of all contact sessions, we are unable to accommodate Honours students who do not reside in Bloemfontein.

C.8 Honours Class Times 2026

Class times of all modules will be communicated during the Honours Information Session on 29 January 2026.

C.9 Honours Registration in 2026

Registration can be finalised in the week after the Honours information session (scheduled for 29 January 2026). The registration deadline is **Friday**, **6 February 2026**.

PART D: MASTER'S (2026)

D.1 Master's Admission Requirements

The following minimum admission requirements apply for our master's programmes:

- BSc Honours Degree (with Computer Science, IT or Data Science as major) on NQFlevel 8.
- Minimum 65% average for the Honours degree.
- Should the applicant not have the required background for the master's degree in a certain research field, they may be required to register for one or more undergraduate, Honours or master's modules before being accepted for the master's degree.

Evaluation and feedback of applications will be processed as follows:

- Applications received between 1 April and 30 September, will only be processed after 30 September of that year.
- Applications received after 1 October, will only be processed after 31 March the next year.

D.2 Duration of Research Master's

• Full-time: Minimum 1 year & maximum 3 years

• Part-time: Minimum 2 years & maximum 4 years

D.3 Research Master's Degree and Module Codes

Programme codes: BC480022 (Computer Science & Informatics)

BC480056 (Computer Information Systems)

BC480095 (Data Science)

Module code: CSIS8900 [Dissertation (180 credits)]

D.4 Research Topic

Your research topic must fit into at least one of the Department's research areas (see **Part F**).

D.5 Master's Proposal

A detailed proposal should be prepared after registration with the assistance of the allocated supervisor (as outlined in **Part B**). The proposal must be presented in person or online to the staff of the CSI Department within three (3) months of registration.

PART E: PhD (2026)

E.1 PhD Admission Requirements

The following minimum admission requirements apply for our PhD programmes:

- A relevant master's degree in Computer Science, IT, or Data Science on NQF-level 9.
- Minimum 65% average for the master's degree.
- Should the applicant not have the required background for the PhD in a certain research field, they may be required to register for one or more undergraduate, Honours, or master's modules before being accepted for the PhD.

Evaluation and feedback of applications will be processed as follows:

- Applications received between 1 April and 30 September, will only be processed after 30 September of that year.
- Applications received after 1 October, will only be processed after 31 March the next year.

E.2 Duration of PhD

• Full-time: Minimum 2 years & maximum 4 years

• Part-time: Minimum 4 years & maximum 6 years

E.3 PhD Degree and Module Codes

Programme codes: BC490022 (Computer Science & Informatics)

BC490056 (Computer Information Systems)

BC490095 (Data Science)

Module code: CSIS9100 [Thesis (360 credits)]

E.4 Research Topic

Your research topic must fit into at least one of the Department's research areas (see **Part F**).

E.5 PhD Proposal

A detailed proposal should be prepared after registration with the assistance of the allocated supervisor (as outlined in **Part B**). The proposal must be presented in person or online to the staff of the CSI Department within six (6) months of registration.

PART F: DEPARTMENTAL RESEARCH AREAS

Postgraduate applicants who apply for a research master's or PhD, must slot into the existing research areas within the CSI Department, namely:

Business Intelligence and Text Mining:

The research area focuses on algorithms and methods to process large-scale data sets with a data science approach. These datasets are predominately structured data (SQL databases) or unstructured natural language text (email messages, microblogs, wikis, and web pages). The primary goal is to extract high-quality information by uncovering patterns and trends using advanced data and text mining techniques. This encompasses natural language processing (NLP) for effective language understanding, text categorisation, sentiment analysis alongside machine learning and deep learning. Additionally, we also leverage large language models (LLMs) like GPT to further enhance text generation, while also exploring the integration of chatbot technologies to facilitate user interaction and information retrieval.

GitHub: https://github.com/eduankotze/BITM

- Computer Science Education (CSE): The aim of the Computer Science Education (CSE) research area is to promote research and scholarship both in the field of Computer Science Education and the application of Computer Science to improve teaching and learning. CSE research typically focuses on finding more effective approaches to teach Computer Science to a larger and more diverse audience, or the development of software that can impact upon the teaching and learning environment.
- Eye-tracking Applications: This research area is aimed at promoting eye tracking
 applications research. This means that eye-tracking is used as a tool to collect data
 or as part of a proposed solution, such as eye gaze interaction. The focus of the
 research is currently on eye gaze interaction and reading research.
- Digital Inclusion and Community Engagement in IT: Research in this area focusses on addressing the critical issue of the digital divide by enhancing digital literacy and technology access for communities surrounding the University of the Free State, particularly in rural and under-served areas. By providing tailored computer literacy training and engaging directly with local needs, this research empowers individuals with the digital skills essential for meaningful participation in today's society. Through collaborative, community-centred IT projects, this work not only improves technological access but also fosters civic responsibility, creating a positive impact on local economic and social development. Initiatives in this field are deeply embedded in service-learning, integrating real-world applications into the educational experience of students. This hands-on approach enriches academic learning, allowing students to apply their IT skills in ways that address genuine societal challenges.

• Human-Computer Interaction (HCI) and Extended Reality: The focus of HCI research is Usability and User Experience (UX) evaluation. Different evaluation methods may be applied, with emphasis on physiological testing involving brain-computer interfaces (BCIs) and Virtual Reality (VR) applications.

Note: If the original topic/proposal does not have any links with the Department's research areas from the offset, the applicant cannot be accommodated. If the applicant's topic/study proposal, however, closely relates to one of the Department's research areas, the applicant should attempt to adapt it so that it fits in totally.

If the applicant is not willing to change their topic/proposal, the Department will not be able to accommodate the applicant.