RHODES UNIVERSITY

Where leaders learn

Faculty of Science

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Faculty of Science

Department of Biochemistry & Microbiology
Biotechnology Innovation Centre
Department of Botany
Department of Chemistry
Department of Computer Science
Department of Environmental Science
Department of Geography
Department of Geology
Department of Human Kinetic & Ergonomics
Department of Ichthyology & Fisheries Science
Department of Mathematics
Department of Physics & Electronics
Department of Statistics
Department of Zoology & Entomology

Science@Rhodes

The Faculty of Science at Rhodes University is the second oldest and third largest of six faculties with approximately 1500 undergraduate and postgraduate students.

The Faculty has 14 departments grouped into three broad areas:

- **Biological Sciences** (Botany, Human Kinetics & Ergonomics, Ichthyology & Fisheries Science, Zoology, Entomology and Microbiology),
- **Earth and Environmental Sciences** (Environmental Science, Geography and Geology), the Chemical sciences (Biochemistry, Biotechnology and Chemistry),
- **Mathematical and Physical Sciences** (Computer Science, Mathematics, Mathematical Statistics and Physics).

Although these groupings exist, the boundaries are not clearly defined and some departments and staff are active within more than one group. Indeed Departments and staff in Departments collaborate with colleagues from all the other faculties in teaching, research and community engagement.

Most departments are characterised by large and vibrant postgraduate schools with 47% of our students being postgraduates. The Departments within the faculty are mostly small with five to 10 staff and the total academic staff complement of the Faculty is 102. Our academic staff are well-qualified with almost 90% having a PhD. Our departments are well-supported by a team of administrative and technical staff.

The Faculty of Science offers two undergraduate (BSc and BSc(InfSys)) and three postgraduate degrees (BSc(Hons), MSc and PhD).

Degrees in the Science Faculty

UNDERGRADUATE DEGREES

Bachelor of Science BSc

The ordinary first degree is taken over three years (a 4-year flexible curriculum is available) and the key feature of the BSc is its flexibility. It is possible for students to combine subjects in myriad ways to create curricula that meet their particular interests. This flexibility includes allowing students to take a major subject from Commerce, the Humanities and Law such that students can major in Environmental Science and Law or Geology and Economics. As a Faculty, we appreciate the value that can be added by allowing students some flexibility when choosing their subjects. The BSc does not set out to educate or train a student for a particular career but rather allows for the construction of a knowledge and skills base that prepares a student for a wide range of possible careers or advanced study in their chosen subject. Emphasis is on discipline-specific knowledge and skills as well as the cross-cutting skills including experimental design, data collection, analysis and interpretation, and scientific communication that form the essential base for research. The flexibility in curriculum design creates an opportunity for students to decide if they are attracted to interdisciplinary academic training and education.

Bachelor of Science (Information Systems) Bsc(InfSys)

This degree is designed to meet the needs of students who wish to combine computer science with some commerce subjects, and to apply their computing expertise in a commercial environment. The curriculum has little flexibility and combines commerce subjects, computer science and information systems.


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Degrees in the Science Faculty

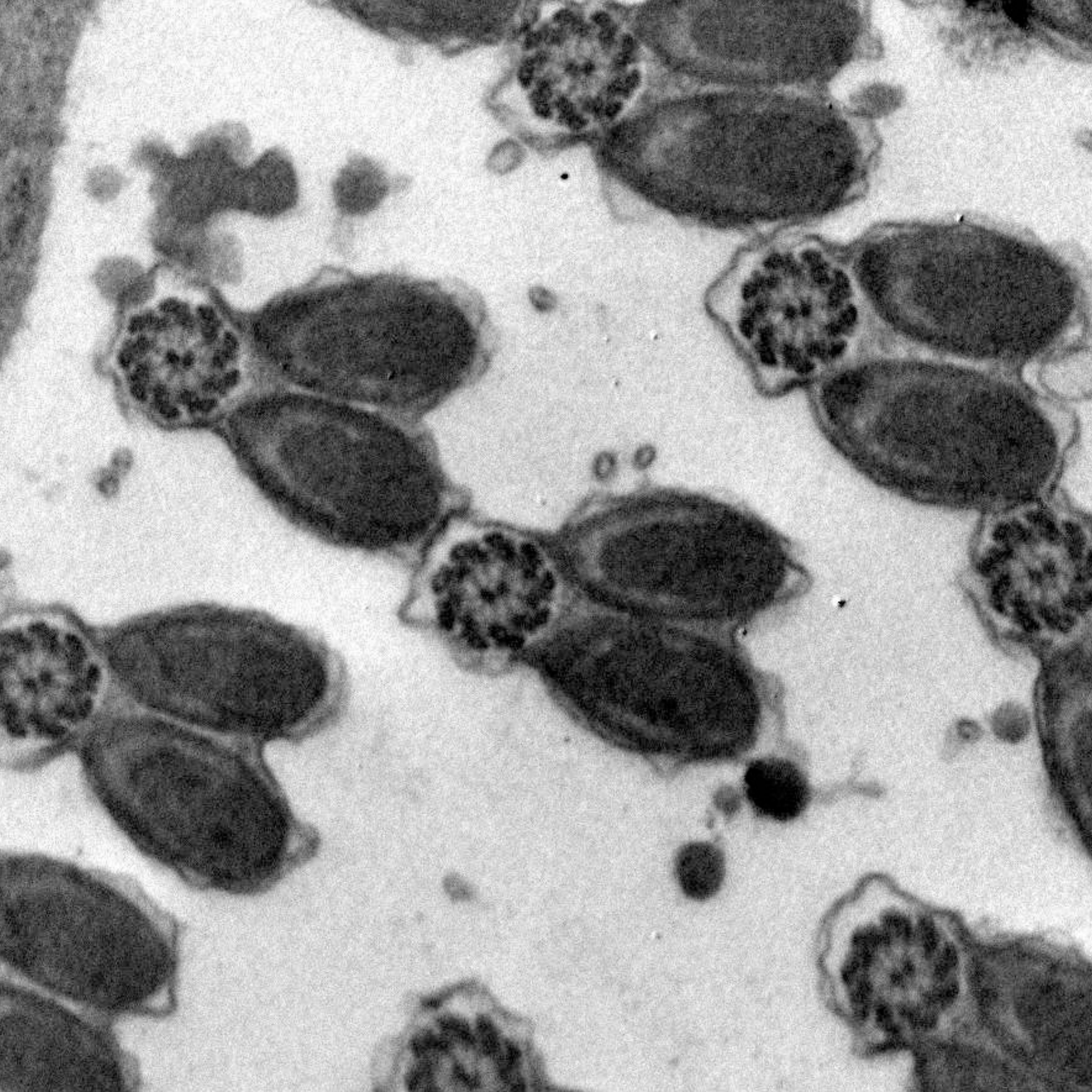
POSTGRADUATE DEGREES

Bachelor of Science with Honours BSc (Hons)

All Departments offer at least one Honours course and in most cases, there is a strong emphasis on original, independent research. The Honours degree creates the pipeline into further postgraduate studies and an emphasis on research skills is appropriate.

Master of Science (MSc) and Doctor of Philosophy (PhD)

At least one Master's and one PhD degree is offered by each department. Some departments offer Master's by course work & thesis as well as by thesis alone and some Departments offer Master's and PhD in several disciplinary areas.



Admission to study for a degree

Admission to study for a degree in the Faculty of Science requires applicants to satisfy a number of criteria: the applicant must qualify for bachelor degree study status on the National Senior Certificate (NSC); the applicant must satisfy Faculty admission requirements – Admission Point Score (APS); and the applicant must satisfy degree admission requirements. Please remember that if you meet the minimum admission requirements this only means that you are eligible for selection; it does not mean that you will necessarily be accepted.

Candidates currently at school doing South African National Senior Certificate
Students leaving school at the end of 2017 will earn the National Senior Certificate (NSC). To qualify for the NSC with bachelor degree study status learners are required to take seven subjects, four of which are compulsory (two languages, Life Orientation and either Mathematics or Mathematical Literacy [Mathematics Literacy will not be considered for Science applications.]) and three of the learner's own choice from the subjects on offer at their school. To qualify for degree studies at a University at least four of the seven subjects must fall within the list of 'designated subjects' and the student must have obtained an achievement rating of 4 (adequate achievement 50-59%) or above in these four subjects.

The designated subject list is as follows:
Accounting, Engineering, Life Sciences, Agricultural Sciences, Graphics and Design, Mathematics/Mathematical Literacy, Business Studies, Geography, Music, Consumer Studies, History, Physical Science, Dramatic Arts, Information Technology, Religion Studies, Economics, Languages, Visual Arts.

What can I study with what marks?

NSC subjects required

Mathematics (55%)
English (50%)
Another NSC language
PLUS

Life Science and/or Physical Science (55%)	Mathematics (60%) Life Science and/or Physical Science (55%)	Mathematics (70%) + 3 other NSC subjects

Degrees offered

BSc

4-year flexible curriculum | **3-year**

BSc (Information Systems)

Two major subjects offered within the degree

Choose any combination of two final subjects (majors)

Physical Sciences
Chemistry
Biochemistry
Physics and Electronics

Numbers and Computing
Mathematics
Mathematical Statistics
Applied Mathematics
Computer Science

Biological Sciences
Botany
Zooogy
Entomology
Icthyology
Human Kinetics and Ergonomics

Earth and Environmental Sciences
Geology
Geography
Environmental Science

Molecular Sciences
Biochemistry
Microbiology

Non-Science subjects
Any other major subject from the Faculties of Law, Commerce or Humanities e.g. Law, Journalism, Psychology, Economics, Music, Fine Art, Anthropology, a language, Information Systems, Sociology, History, Linguistics

Final year subjects (majors):

Computer Science
and
Information Systems or
Applied Statistics or Economics
or
Mathematical Statistics or
Accounting or
Management or
Mathematics

How to calculate your APS

The percentages achieved in National Senior Certificate examinations (preliminary and final examinations) will be allocated an **Admissions Point Score** (APS) using the percentage obtained for each subject. The sum of six subject scores, excluding Life Orientation but including English and any other required subject(s) for the relevant programme is considered when deciding on admission.

Results below 40% for any subject do not attract a score. Mathematics Paper 3 does not contribute to the APS score but the results will be captured for the Dean to note when making an admission decision. For example:

SUBJECT	PERCENTAGE	POINTS
English Home Language	73%	7.3
Afrikaans/isiXhosa first/ Additional Language	69%	6.9
Mathematics	84%	8.4
Life Sciences	86%	8.6
Economics	90%	9.0
Accounting	69%	6.9
Life Orientation	70%	0
Mathematics Paper 3	50%	0
TOTAL POINTS		47.1

Faculty of Science admission requirements

The entry requirements and points required for admission to Faculty degrees are as follows:

BACHELOR OF SCIENCE (INFORMATION SYSTEMS)

Mathematics at Level 6 (70%) or above

- *45 points and above* — candidate will receive a firm offer
- *40-44 points* — admission will be at the Dean's Discretion

BACHELOR OF SCIENCE

Mathematics level 4 (60%) or above.

- *45 points and above* — candidate will receive a firm offer
- *Between 38-44 points* — admission will be at the Dean's Discretion. Various factors will be taken into consideration.
- *Between 34-37 points* — applications will be considered by the Dean for the 4-year flexible curriculum programme
- *33 points and below* — the application is likely to be rejected

Faculty of Science contact details

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