



BSc (Hons) Plant Sciences and BSc (Hons) Medicinal Plant Sciences
Department of Plant and Soil Sciences
GENERAL INFORMATION
(Programme coordinator Dr Gary Stafford – gary.stafford@up.ac.za)

1. Background and Objectives of the Honours programme

Studying the Plant Sciences in South Africa today will open a wealth of discoveries for Honours students. Our country boasts of more than 20 000 plant species, we have spectacular landscapes, and a scientific community committed to conserving our environment for current and future generations. Our botanical wealth is a rich source of medicines, and together with a strong agricultural sector, research in these fields has an exciting future, exemplified by the Bioeconomy Strategy announced by the Department of Science and Technology.

The Honours Programme of the Department of Plant and Soil Sciences at the University of Pretoria covers the spectrum of Plant Sciences, allowing students to educate themselves further in the fields of **Plant Diversity, Plant Ecology, Plant Physiology/Biotechnology or Medicinal Plant Science**.

The Department prefers Honours students to register full-time and be present at the Department full-time to complete the Honours course in one year; however, the course is designed to accommodate part-time students who may be employed who are expected to complete in two years. Most of the modules are presented through the Internet, using web-based interactions, complemented by comprehensive campus based practical sessions in specific blocks.

2. Study programme

The course can be completed over one (full-time, recommended) or two years (part-time, allowed only under exceptional circumstances), depending on the time available for study. Modules include theoretical work (presented mostly by means of the internet but also by some contact with lecturers) and practical work, which will be done under guidance during practical blocks on campus (February, April, August). Students are also expected to do a practical project involving either laboratory or field work. The total number of credits should add up to 135.

Our Department offers the following Honours courses:

- **BScHons PLANT SCIENCE (02240707)**
(with specialization in one of the following fields)
 - Plant Diversity
 - Plant Ecology
 - Plant Physiology / Plant Biotechnology
 - Plant Pathology
- **BSc (Hons): (Option) MEDICINAL PLANT SCIENCE (02240706)**

Suitable qualified students may also enroll for the inter-departmental BSc (Hons): BIOTECHNOLOGY (02240393) with a Study Leader in the Department of Plant and Soil Sciences. Please contact Prof D Berger (email dave.berger@up.ac.za tel: 012-420 4634) for further details and consult the link [BScHons \(Biotechnology\) at www.up.ac.za/plant-and-soil-sciences/article/45005/postgraduate-degrees-in-plant-and-soil-sciences](http://www.up.ac.za/plant-and-soil-sciences/article/45005/postgraduate-degrees-in-plant-and-soil-sciences)

3. Outcomes

Outcomes are determined by the combination of modules selected. Students may be qualified to do environmental impact assessments (EIA), identify plants, use and develop plant classification systems, extract and isolate bioactive compounds from medicinal plants, employ molecular biological techniques for the breeding of new crops or advanced crop protection, appreciate the complex phytodiversity of southern Africa and its economic potential, advise on the wise and sustainable utilisation of the diversity, become entrepreneurs, consult on matters ranging from environmental impact studies and wildlife management to genetically modified (GM) plant. An Honours degree in Plant Science or Medicinal Plant Science or Biotechnology enables students to subsequently register for a masters and eventually a doctorate degree, and so enhance their understanding and appreciation for the extraordinary world of plants.

4. Aim of the degree

After completion of the Honours degree the student must have sufficient intensive theoretical subject knowledge to be able to apply it independently, to show insight and be capable of discussing the subject with confidence. The student must be able to identify and formulate a problem, compile a project proposal with the necessary literature survey, conduct research under guidance and present a report in the form of a mini-dissertation.

4.1. Prerequisites

A BSc-degree with several Plant Science modules on third year level is a requirement. It is a strong recommendation for applicants to have obtained at least 60% for 300 level Plant Science modules, though this is not an absolute requirement to be accepted for the Honours study. Each application will be considered individually, and the Head of Department will, after an academic staff meeting, make a final decision on whether an applicant will be accepted for the Honours course in Plant Science.

4.2. Closing date

All applications for admission to the BSc Honours degree must preferably reach the course co-ordinator BEFORE, OR ON THE **31st of OCTOBER** of the year preceding the intended study.

4.3. Duration of the degree

The degree extends over one academic year for **FULL-TIME STUDENTS** and over one and a half to two consecutive years for **PART-TIME STUDENTS**.

4.4. Nature of the Honours programme

The theoretical component of most modules are web-based. All the study objectives and outcomes, literature references and assignment information for each module are available on the web modules' sites. These sites become accessible to the student once he/she has registered for the particular module. E-mail is used where students can communicate with fellow students and most importantly, the lecturers. The practical component of each module is completed during block sessions (2 to 4 days per module) during the course of the year.

For more information see:

BScHons Plant Science

<https://www.up.ac.za/en/yearbooks/2019/programmes/view/02240707>

BScHons Medicinal Plant Science

<https://www.up.ac.za/en/yearbooks/2019/programmes/view/02240706>

BScHons Biotechnology

<https://www.up.ac.za/en/yearbooks/2019/programmes/view/02240393>