



## MINI-BROCHURE

Natural Resources Development College (NRDC) is a tertiary training institution under the Ministry of Agriculture. NRDC was established in 1965 to train and therefore supply human resource in agriculture and related disciplines.



**TRAINING COURSES:** NRDC offers Diploma training underwritten (or certified) by the University of Zambia (UNZA).

The College offers several Diploma courses in:-

- i.) Agriculture: This has three specializations or majors namely Agribusiness Management (**ABM**); Animal Science (**ASM**); and Crop Science (**CSM**);
- ii.) Agricultural Education and Extension (**ED**)
- iii.) Agricultural Engineering (**AE**)
- iv.) Fisheries (**FS**)
- v.) Food and Nutrition (**FN**)
- vi.) Horticulture (**HM**), and
- vii.) Water Engineering (**WE**)

**TRAINING MODES:** Training is offered in several ways or modes:

- a.) The Regular Program: This is the main mode which offers all the above courses. Under this mode, students are enrolled both as boarders as well as day scholars.
- b.) The Parallel Diploma Program (PDP): This is another way of offering training to those who cannot be incorporated in the Regular Program. This is purely because the college does not have enough classroom and boarding space compared to the number of people wanting to study at NRDC. Therefore, in order to give training opportunities to as many individuals that qualify to be NRDC students as possible, the college created another stream of students. This stream forms the Parallel program. Its classes run during the regular semesters i.e. alongside the Regular Program. However, those in the Parallel Program start their classes around 10.00 AM to almost 7.00 PM (or 19:00 hours). In addition to this, those in the Parallel stream are not offered student hostel accommodation. Instead students can be accommodated in various boarding houses in the various neighbourhoods of the college. The Parallel Program currently offers training in ABM, ASM, CSM, FN, AE, and WE.
- c.) The Open and Distance Learning (ODL) Program: This program is designed to offer training to those who might not manage to enrol on full-time basis. It targets those in employment and as such unable to obtain leave for full-time study; or those engaged in certain undertakings might not be compatible with full-time study. ODL is like learning by correspondence or self-study where students are given materials that help them to study on their own for most of the time. Students, however, attend a **5-week** residential school in each semester. The residential school is a period when ODL students report at the college to attend classes, laboratory and farm practical sessions, as well as sit for tests and examinations. Most of these activities take place from 08:00 hours to 19:00 hours, Monday to Friday, for the five-week period. Attending the residential school is therefore mandatory. As such, students in employment are expected to arrange for leave with their employers in order to attend the residential school.

ODL offers training in **ABM, ASM, CSM, ED, FS, FN, and WE.**

### **THE ACADEMIC YEAR AND DURATION OF TRAINING**

The academic year at NRDC begins around January in each year.

Training takes three (3) academic years

**ADMISSION REQUIREMENTS:** To be admitted as a student of NRDC, one has to have Credits or better in the following Grade 12 (secondary school) subjects: English Language, Mathematics, Science (Physics or Chemistry), Agricultural Science (or Biology), and any other subject relevant to the course for which one is applying.

Holders of 2-year certificates (with Distinction, Merit, or Credit) in a relevant field (e.g. a Teachers certificate for those applying for **ED**), are also regarded as meeting the minimum entry requirements.

### **APPLICATION PROCESS**

The College starts receiving applications around March of each year. For example, the College started receiving applications in March 2016 from those wishing to start in January 2017.

Application forms for all the programs are available on **www.nrdc.biz**; the forms have instructions for the applicants. An application processing fee (K150) is specified on the form. In addition to applying, those seeking admission under the Regular and Parallel Programs may be required to sit for aptitude tests, and in such a case another fee (K100) must also be paid for one to attend these aptitude tests.

NRDC graduates can work in both the public sector and private sector organizations. **ED** graduates are trained primarily to be agricultural science teachers at secondary school level.

### **TRAINING COURSES IN DETAIL**

1. **AGRICULTURE:** Students enrolled under this program mainly study crop and livestock production courses. Key subjects include crop production, crop protection, soil science, animal production, dairy production, animal health, and farm management. But because agriculture is

multi-disciplinary, students also cover other crosscutting courses/subjects important to agriculture such as farm accounts, economics, agricultural engineering, sociology, statistics, agricultural extension, and project management. Students under this program of study specialize in three majors namely:

a.) **Agribusiness Management (ABM):** students in this specialization/major cover additional business courses such as marketing and cooperatives, economic development, as well as accounting and management.



b.) **Animal Science (ASM):** under this specialization students take additional such as animal health, meat inspection, fish farming, and animal breeding,



c.) **Crop Science (CSM):** students in the major take specialized subjects such as evaluation and improvement of soils, as well as advance crop husbandry and research.



Upon completion of training, graduates can be employed in the both the public and private sectors such as the Ministry of Agriculture, NGOs, private farms, agro processors, financial institutions, and agro-chemical

companies. Graduates can also manage own- or family farm business.

2. **AGRICULTURAL EDUCATION (ED):** This program of study is primarily meant to train individuals who seek to be teachers at secondary school level. Graduates in this course can teach such subjects as Agricultural Science, Environmental Science, and Biology.



Courses/subjects taken by students in this program of study are similar to those take by the their counterparts in Agriculture such as crop production, crop protection, soil science, animal production, farm management, farm accounts, economics, agricultural extension, fish farming, statistics, and project management.

In addition, ED students take specialised educational courses such as curriculum studies, sociology of education, teaching methods, as well as psychology of education.

Apart from teaching at secondary schools, ED graduates can work as extension personnel and as production unit managers in government, the private sector, and in NGOs that engage in various forms of literacy activities.

3. **AGRICULTURAL ENGINEERING (AE):** focus in this case is on engineering practices relevant to agriculture. Students learn courses such as technical drawing, surveying, workshop



technology, electrification, hydrology, irrigation and drainage, farm machinery, machinery management, and farm structures.

In addition, AE students also take crosscutting subjects such as farm accounts, economics, sociology, agricultural extension, statistics, and project management. They also take moderate crop and animal production courses.

AE graduates have a wide range of employment opportunities in the Ministry of Agriculture, NGOs, private firms, as well as self-employment.

4. **FOOD AND NUTRITION (FN):** This program of study focuses on key issues relating to nutrients, food preparation and preservation. It also deals with nutritional aspects like human dietary requirements, and food based therapies.

Apart from taking the crosscutting subjects such as farm accounts, economics, sociology, agricultural extension, statistics, project management, and



crop and animal production, **FN** students also take specialized subjects like human biology, biochemistry, human nutrition, food science, public health nutrition, community nutrition, dietetics, as well as nutrition education and health promotion.

Employment opportunities for **FN** graduates exist in the Ministry of Agriculture, Ministry of Health, Ministry of Education, the Food and Nutrition Commission, NGOs, and in the private sector food processors and health providers.

5. **FISHERIES (FS):** Students in this program of study mainly study production and management aspects of various fish species.

In addition to crosscutting subjects, **FS** students also take specialized courses such as marine engineering, surveying, hydrobiology, aquaculture, fish gear technology, and aquatic ecology.



**FS** graduates have a range of employment opportunities in the Ministry of Livestock, NGOs, private firms, as well as self-employment.

6. **HORTICULTURE (HM)**: in this program of study focus is on the production and management of food plants (fruits & vegetables) and non-food plants (grass, flowers, shrubs, & trees). This also includes landscaping and garden design, construction, and maintenance.



In addition to crosscutting subjects, **HM** students take specialised subjects like hydrology, nursery management, production horticulture, landscaping & garden design, postharvest physiology & cold chain management.

HM graduates can work in the Ministry of Agriculture; Local Government; Works & Supply, NGOs, private firms, as well as self-employment.

7. **WATER ENGINEERING (WE)**: Training under this program of study focuses on the management of water, water waster, as well as water sanitation.

**WE** students take similar courses as their counterparts in **AE**. In addition, **WE** students take specialised subjects like mechanics of sediment transport, advanced hydrology, as well as advanced water supply and sanitation.

**WE** graduates can work in both the public sector (e.g. Ministries of Agriculture; Ministry of Livestock; Energy and Water Development; Works & supply; and Local Government) and in the private sector as irrigation experts, and also as senior technicians in water utility firms.

