

Environmental Specialization

There are numerous environmental issues faced by society. The environmental specialization provides engineers with the knowledge to predict environmental impacts due to human developments and to solve problems associated with the environment (soil contamination, pollution of rivers and lakes, air pollution, wastewater treatment

Students who obtain a grade of “C” or better in the courses listed below will receive a notation of “environmental specialization” on their transcript at the time of graduation.

Group A: Science Electives (choose both courses)

BIOE 2600 Principles of Plant and Animal Physiology for Engineers

SOIL 4060 Physical Properties of Soil

Group B: Biosystems Engineering Design Electives (choose 3 from the list)

BIOE 4460 Air Pollution Assessment and Management

BIOE 4590 Management of By-Products from Animal Production

BIOE 4600 Design of Water Management Systems

BIOE 4620 Remediation Engineering

BIOE 4700 Alternative Building Design

Group C: Complementary Studies (choose 2 from the list)

ABIZ 2390 Introduction to Environmental Economics (or equivalent)

ENVR 1000 Environmental Science 1 – Concepts

ENVR 2000 Environmental Science 2 - Issues

ENVR 2270 Environmental Problem Solving and Scientific Thinking

ENVR 3160 Environmental Responsibilities and the Law

ENVR 3400 Introduction to Environment and Health

ENVR 3750 Green Building and Planning

ENVR 3850 Sustainable Manitoba

ENVR 4050 Ecosystem Management

ENVR 4400 Advanced Issues in Environment and Health

GEOG 2520 Geography of Natural Resources

PHIL 2750 Environmental Ethics

Group D: Free Electives (choose 2 from the list)

(Note: additional courses from Group B or C can be used to fulfill Group D electives.)

AGEC 2370 Principles of Ecology (or equivalent)

CIVL 3690 Environmental Engineering Analysis

CIVL 3700 Environmental Engineering Design

CIVL 4350 Hazardous Waste Treatment

ENVR 2550 Environmental Chemistry

ENVR 3110 Environmental Conservation and Restoration

GEOG 3730 Geographic Information Systems

Note: Special permission may be granted by the Head of Department for courses not appearing on the list for Group C or Group D.