

College & University Science Requirements

Red River College Entrance Programs

Program	Required Science Courses
Animal Health Technology	Biology 40S and Chemistry 40S
Automotive Technician Certificate	Grade 10 minimum
Automotive Technician Diploma	Grade 10 minimum
Aviation Management	Physics 40S Recommended
Carpentry	Grade 10 minimum
Chemical & Biosciences Tech Co-op	2 of Biology, Chemistry, or Physics (Chemistry strongly recommended)
Civil Engineering Technology	Strong Background in Science Courses Recommended
Collision Refinishing	Grade 10 minimum
Collision Repair and Refinishing	Grade 10 minimum
Construction Management	Strong Background in Science Courses Recommended
Dental Assisting Level II	Minimum of One 40S Science, Biology 40S Recommended
Electrical	Grade 10 minimum
Greenspace Management	Strong Background in Science Courses Recommended, Horticulture
Health Care Aide	Grade 10 minimum
Health Information Management	BI40S or Ch40S
Heavy Duty Mechanic	Grade 10 minimum
Manufacturing Technician	Minimum of One 40S Science
Mechanical Engineering Technology	CH40S or PH40S (Physics Recommended)
Nursing	Minimum of 60% in one 40S Science (Biology, Chemistry, Physics)
Occupational Health & Safety	Minimum of One 40S Science (Biology, Chemistry, Physics)
Paramedic	BI30S minimum, and CH40S or PH40S
Pharmaceutical Manufacturing	Minimum of One 40S Science (Biology, Chemistry, Physics)
Plumbing	Grade 10 minimum
Power Engineering - 5th Class	CH30S or PH30S minimum
Power Engineering Technology	CH30S or PH30S minimum
Precision Metal Manufacturing	Minimum of One 40S Science
Professional Baking	Grade 10 minimum
Refrigeration & Air Cond. Technician	Minimum of One 30S Science (Chemistry or Physics would be an asset)
Welding	Grade 10 minimum

Note:

Many programs at Red River College are “after-degree/diploma” or integrated programs and are not listed above. Depending on the field, science courses may be required to pursue these careers. A few examples are Radiation Therapy, Applied Environmental Sciences, Applied Chemistry or Biology, MRI and Spectroscopy

Be sure to check with your guidance councilor or the college or university to ensure you satisfy all entrance requirements.

College & University Science Requirements

University of Manitoba Direct Entrance Programs

The University of Manitoba has a few select faculties that will admit students straight from high school. The faculties that have specific science requirements are as follows:

Faculty	Required Science Courses
University 1	General Admission. Required Science courses will depend on which faculty you choose after completion of University 1.
School of Agriculture (Diploma)	Minimum one Science 40S course
Faculty of Engineering	Chemistry 40S and Physics 40S
Agriculture and Food Science	One of Biology 40S, Chemistry 40S, Physics 40S
Dental Hygiene	Chemistry 40S, Biology 40S Strongly Recommended
Dentistry	Biology 40S, Chemistry 40S, Physics 40S
Education	Depends on selected teaching areas
Environment, Earth and Resources	Environmental Science, Biology 40S, Chemistry 40S, Physics 40S
Human Ecology	Biology 40S, Chemistry 40S, Physics 40S
Kinesiology & Recreation Management	Biology 40S, and one of Chemistry 40S or Physics 40S
Medical Rehabilitation	Biology 40S, Chemistry 40S, Physics 40S (depending on area of study)
Medicine	Biology 40S, Chemistry 40S, Physics 40S is strongly recommended
Nursing	Biology 40S, and one of Chemistry 40S or Physics 40S
Pharmacy	Biology 40S, Chemistry 40S
Science	Biology 40S, Chemistry 40S, Physics 40S (Depends on Major)

University of Winnipeg Programs

The University of Winnipeg will have similar requirements as above, but there are some different programs that are offered:

Be sure to check with your guidance councilor or the college or university to ensure you satisfy all entrance requirements.

Faculty/Program	Required Science Courses
Bioanthropology	Biology 40S, Chemistry 40S
Biochemistry	Biology 40S, Chemistry 40S
Biopsychology	Biology 40S, Chemistry 40S
Biology/Chemistry/Physics	The appropriate 40S science courses
Environmental Studies	Environmental Science, Biology 40S, Chemistry 40S
Kinesiology and Applied Health	Biology 40S, Chemistry 40S
Psychiatric Nursing	Biology 40S, Chemistry 40S