

TECHNOLOGY EDUCATION PROGRAM

Required and Recommended Teacher Certification Qualifications

School divisions and schools should be aware of the following when planning for Technology Education Programs (TEP) and courses:

Teacher Education Qualifications and Certifications

Technical-Vocational Education (TVE), Grades 9 to 12

www.edu.gov.mb.ca/k12/cur/teched/sy_tech_program.html

Technical-vocational education (TVE) provides students with the skills and competencies needed to successfully transition into the workplace, apprenticeship opportunities, post-secondary education, and their daily lives. It also allows students to explore, sample, specialize, and transition into a designated or non-designated trade or occupation. This pathway provides students with skills to enter the world of work or continue in further post-secondary education. Students who complete the cluster of courses in a designated stream may be eligible for the Senior Years Technology Education Program Diploma and/or advanced standing in a post-secondary program. Manitoba Education requires all TVE courses to be taught by persons who hold the Permanent Technical-Vocational Teaching Certificate. Qualifications for this teaching certificate are set out in the Teaching Certificates and Qualifications Regulation 115/2015. It provides for a teaching entitlement in TVE courses from Grades 9 to 12. Certification qualifications include the following:

1. A Technical-Vocational Teacher Education Diploma consisting of at least 90 credit hours of which at least 45 credit hours were professional course work including at least 18 weeks of student teaching. Information on acquiring the Technical-Vocational Teacher Education Certification is available at www.rrc.ca/education/technical-vocational/. *Please note that teachers who hold a Permanent Technical-Vocational Teaching Certificate can only teach in their industry-certified specialty area (designated or non-designated trade).*
2. Industry certification (trained journeyperson status or industry-specific certification), including having experience working in that industry, or designated or non-designated trade (trained occupation) as outlined in the following:

A. Designated Trades with Red Seal Certification

(TVE programs: Automotive Technology, Baking and Pastry Arts, Cabinet and Furniture Making, Carpentry, Collision Repair and Refinishing Technology, Culinary Arts, Electrical Trades Technology, Esthetics, Hairstyling, Heavy Duty Equipment Technician, Horticulture, Machining Technology, Plumbing and Pipe Trades, Refrigeration and Air Conditioning, Welding Technology)

- a certificate of qualification (journeyperson's certificate or equivalent to a Manitoba trade-specific credential as determined by Apprenticeship Manitoba)
- two years of approved trade experience from the documented date of receiving the approved trade credential
- the Red Seal endorsement

OR

B. Other Designated Trades

(TVE Program: Aircraft Maintenance Technology)

- a certificate of qualification (journeyperson's certificate or equivalent to a Manitoba trade-specific credential as determined by Apprenticeship Manitoba)
- two years of approved trade experience from the documented date of receiving the approved trade credential

OR

C. Non-designated Trades

(TVE Programs: Aviation Ground School, Aviation and Aerospace Technologies, Broadcast Media Technology, Dental Assisting, Dental Technology, Early Childhood Education, Electronics Technology, Fashion Design and Technology, Graphic Design, Health Care Aide, Hotel Hospitality, Interactive Digital Media, Jewellery and Metalsmithing, Mining Engineering Technology, Motion Picture Arts, Networking and Cyber Security, Photography, Print Media, Resources and Environmental Management, Sound Engineering, Sustainable Energy)

- at least one year of formal training (can be included in the six years of work experience)
- at least six years of approved work experience including two years under the supervision of a person who holds an approved credential or has approved training in the trade

Persons who hold the Permanent-Technical-Vocational Teaching Certificate may go on to qualify for a Bachelor of Education providing for a teaching entitlement from K-12 with a major in vocational education. The Technical-Vocational Teacher Education diploma program makes up the first three years of the five-year joint RRC-University of Winnipeg Bachelor of Education Degree. The fourth and fifth years are taught at the University of Winnipeg.

Industrial Arts (IA) Programs, Grades 5 to 12

www.edu.gov.mb.ca/k12/cur/teched/ind_arts.html

Industrial Arts programming provides the opportunity to actively learn in a hands-on environment with technological tools, equipment, materials, and processes to transform concepts and ideas into goods and services. Areas of study consist of Manufacturing, Graphic Communications, Power and Energy, Construction, Drafting Design, Electricity/Electronics, Graphic Communication, Metalwork, Power Mechanics, and Woodwork.

Recommended qualifications for this discipline are those of certified teachers that have completed a Bachelor of Education with a major in Industrial Arts. This Bachelor of Education degree is available through a joint program with Red River College and the University of Winnipeg Bachelor of Education degree program (www.rrc.ca/education/industrial-arts/).

It should be noted that teachers who hold a Bachelor of Education with a major in Industrial Arts do *not* have the required qualifications to teach a Technical-Vocational cluster.

Human Ecology Programs (HE), Grades 5 to 12

www.edu.gov.mb.ca/k12/cur/teched/home_ec.html

Human ecology courses provide an interdisciplinary approach that integrates social and physical science theory and action through the study of everyday living. Areas of study consist of Human Ecology, Family Studies, Food and Nutrition, Textile Art and Design, Clothing and Textiles, Environmental Design, and Applied Family Studies.

Recommended qualifications for this discipline are those of certified teachers that have completed a Bachelor of Education with a teachable major or minor in Human Ecology by completing one of the following undergraduate degree programs qualifying for entry into their two-year after degree Bachelor of Education program: Bachelor of Health Studies (B.H.St.), Bachelor of Science in Human Nutritional Sciences (B.Sc.), or Bachelor of Environmental Design (B.Env.D.). These undergraduate degrees are available at the University of Manitoba.

Additional Recommendations Include

Specialized studies from an undergraduate degree program or additional post-secondary/professional development coursework from Health Promotion and Education, Family Health, Human Nutritional Sciences, Environmental Design, and Textiles/Clothing and Design.

OR

A Bachelor of Education with a teachable major or minor in Human Ecology, and the former Bachelor of Human Ecology/Home Economics (B.H.Ec.) or Bachelor of Human Ecology in Family Social Sciences (B.H.Ecol-Family Social Sciences).

It should be noted that teachers who hold a Bachelor of Education with a major in Human Ecology do *not* have the required qualifications to teach a Technical-Vocational cluster.

Applied Commerce Education (ACE), Grades 9 to 12

www.edu.gov.mb.ca/k12/cur/teched/bus_ed.html

Applied Commerce Education (ACE) consists of an optional cluster of courses for high school students interested in pursuing a future career in a commerce-related field such as economics, entrepreneurship, business, marketing, technology, or finance. Each of the individual courses is also an excellent option for any student wanting to understand more about their role in our global economy. The fourteen course offerings in the Applied Commerce area allow students to develop the skills needed to be effective business leaders, innovators, citizens, consumers, and employees.

Recommended qualifications for this discipline are those of certified teachers that have completed a Bachelor of Education with a major in Business Education. This Bachelor of Education degree is available through a joint program with Red River College and the University of Winnipeg Bachelor of Education degree program (www.rrc.ca/education/business-education/).

It should be noted that teachers who hold a Bachelor of Education with a major in Business Education do *not* have the required qualifications to teach a Technical-Vocational cluster.

Technology Education Program (TEP) Implications

Approval Process

School divisions who wish to offer new Technology Education Programs (TEP) must consult with the Instruction, Curriculum, and Assessment Branch (ICAB) to ensure that they are meeting requirements for specific programs. This may include facilities, teacher certification, teacher certification qualification recommendations, funding supports and reporting, and Workplace Safety and Health. Information on program approval processes will be provided upon contacting the department. Specific Technology Education Program courses referred to in this information can be found in the *Technology Education Subject Table Handbook* at www.edu.gov.mb.ca/k12/docs/policy/sthte/index.html.

Safety Implications

Schools must offer Technology Education activities that are educationally rewarding and relevant to both students' lives and their possible future careers, in a safe environment. These desired goals can only be achieved through a team effort involving all of those who set and administer school policies, design and maintain the learning environment, plan and deliver lessons, maintain facilities and equipment, and select and prepare the materials used.

Principals and classroom teachers must be aware of accident/injury liability and negligence statements found in *The Public Schools Act*, as well as in the Manitoba Education *Administrative Handbook for Schools*, "Negligence and Liability" (www.edu.gov.mb.ca/k12/docs/policy/admin/school_admin.pdf), and the Workplace Safety and Health Regulations. **Hiring teachers with the right qualifications will ensure that safety regulations and requirements are met.**

Accreditation Implications

Technical-vocational education clusters in designated or non-designated trade areas may have special accreditations associated with the program. Many of these accreditations would allow students to obtain advance standing credentials towards certification or further post-secondary education. The TVE cluster would be accredited based on having a technical-vocational certified teacher for that cluster. In cases where there is a non-technical-vocational certified teacher teaching the cluster, accreditation may be at risk or removed and the specific credential for the cluster would be denied.

Funding Implications

Manitoba Education provides specialized funding support for Technology Education programs to ensure school divisions can provide state of the art programming with industry standard facilities and equipment. This specialized funding is provided through

- Unit Credit and Program Credit Funding
- Technology Education Equipment Replacement Grant
- Skills Strategy Equipment Enhancement Fund Grant
- New Establishment Grant for New Facilities

School divisions offering TEP programs may be eligible for TEP funding and should be aware of specific teacher qualifications required to meet all funding criteria. School divisions are provided with the requirements for TEP funding through consultations with ICAB staff as well as TEP approval process staff.

For information on Teacher Certification or Limited Teaching Permits, please contact

Professional Certification Unit

Box 700

Russell, Manitoba R0J 1W0

Telephone: 1-800-667-2378 or 1-204-773-2998, ext. 223

Fax: 1-204-773-2411

For information on Technology Education programming, please contact the following:

English Program

Senior Years Technology Education
Program Unit

Telephone: 204-945-1857

Toll-Free: 1-800-282-8069, ext. 1857

Email: tve@gov.mb.ca

Français Program

Bureau de l'éducation française

Telephone: 204-945-6916

Toll-Free: 1-800-282-8069, ext. 6916

Email: befadmin@gov.mb.ca