

“Why Do I Need This Math Class?”

Strong **MATH** skills are required for the following jobs:



Agricultural Economist ■ Agriculture/Commodity Broker ■ Agriculture and Natural Resources Teacher ■ Conservation Scientist ■ Crop Farm Manager ■ Food and Fiber Engineer ■ Golf Course Superintendent ■ Greenhouse Manager ■ Produce Buyer ■ Wildlife Biologist ■ Soil and Water Conservationists ■ Forester ■ Landscape Architect ■ Environmental Engineer



Carpenter ■ Computer Aided Designer ■ Demolition Engineer ■ Energy Auditor/Retrofitter ■ General Contractor ■ Green Landscaper ■ Heating ■ Air Conditioning ■ Ventilation and Refrigeration (HVAC) ■ Residential and Industrial Builder ■ Roofer ■ Wind Turbine Maintenance



Graphic Designer ■ Photographer ■ Textile Designer ■ Fashion Designer ■ Film/Video Editor ■ Production Manager ■ Graphics and Printing Equipment Operator ■ Multi-Media Animator ■ Audio/Visual Equipment Technician ■ Commercial Artist/Illustrator ■ Telecommunication Technician



Credit and Collections Manager ■ Labor and Personnel Relations ■ Management Analyst ■ Office Manager ■ Operations Research Analyst ■ Risk Manager ■ Purchasing Management



Math Teacher ■ College Professor ■ Recreation Worker ■ Pediatric/Maternal Nurse ■ Youth Services Worker ■ Director of Religious Education ■ School Administrator ■ Elementary Teacher ■ School Social Worker ■ Teacher Aide ■ Education Paraprofessional



Actuary ■ Auditor ■ Certified Public Accountant ■ Chief Financial Officer ■ Credit Analyst ■ Insurance Appraiser ■ Investment Advisor ■ Loan Processor ■ Underwriter



Commissioner ■ Electronic Warfare Operations ■ Cryptographer ■ Economic Development Coordinator ■ Assessor ■ Tax Auditor ■ IRS Investigator ■ Tax Attorney ■ Tax Policy Analyst ■ Code Inspector ■ Chief Bank Examiner ■ Census Clerk



Athletic Trainer ■ Dental Laboratory Technician ■ Dietician ■ Exercise Physiologist ■ Pharmacy Technician ■ Physical Therapist/Assistant ■ Ophthalmologist ■ Optometrist ■ Respiratory Therapist ■ Computer Tomography Technologist ■ Cytotechnologist ■ Electrocardiographic Technician



Club Membership Developer ■ Director of Sales ■ Director of Operations ■ Entrepreneur ■ Food and Beverage Manager ■ General Manager ■ Kitchen Manager ■ Night Auditor ■ Restaurant Owner



Preschool Teacher ■ Childcare Facility Director ■ Childcare Assistant ■ Vocational Rehab Counselor ■ Employment Counselor ■ Consumer Credit Counselor ■ Consumer Advocate ■ Insurance Representative ■ Financial Advisor ■ Investment Broker ■ Buyer ■ Small Business



Database Developer ■ E-business Specialist ■ Media/Instructional Designer ■ Network Administrator ■ Software Applications Engineer ■ Systems Engineer ■ Technical Writer



Bailiff ■ Security Director ■ Computer Forensic Specialist ■ Computer Security Specialist ■ Computer Forensics Examiner ■ Gaming Surveillance Specialist ■ Intelligence Research Operations Specialist ■ City Manager



Design Engineer ■ Electrical and Electronics Technician ■ Industrial Machinery Mechanic ■ Instrument Calibration and Repairer ■ Instrument Control Technician ■ Machine Tool Operator ■ Plumber ■ Pipefitter and Steamfitter ■ Power Generating and Reactor Plant Operator ■ Welder ■ Woodworker



Advertising Sales Agent ■ Marketing Manager ■ Purchasing Manager ■ Real Estate Broker ■ Real Estate Appraiser ■ Sales Engineer ■ Wholesale and Retail Buyer



Astronomer ■ Biotechnology Engineer ■ Chemist ■ Ecologist ■ Energy Transmission Engineer ■ Geothermal Engineer ■ Mathematician ■ Math Teacher ■ Nanobiologist ■ Petroleum Engineer ■ Pharmaceutical Engineer ■ Prototype Engineer ■ Statistician ■ Technical Writer ■ Toxicologist



Aircraft Mechanic ■ Air Traffic Controller ■ Automotive Technician ■ Environmental Protection Specialist ■ Flight Engineer ■ Industrial Equipment Mechanic ■ Industrial Hygienist ■ Marine Captain ■ Port Manager ■ Railroad Inspector ■ Ship Engineer ■ Traffic Technician

The 16 career clusters are occupational categories with industry-validated knowledge and skills statements that define what students need to know and be able to do in order to realize success in a chosen field.

Within each of the clusters, programs of study (also called “career pathways”) have been developed which outline sequences of academic, career, and technical courses and training that begin as early as ninth grade and lead to progressively higher levels of education and higher-skilled positions in specific industries or occupations.

It is envisioned that all students will achieve challenging academic and technical standards and be prepared for high-skill, high-wage, or high-demand occupations in current or emerging professions in the 21st century global economy.

It is the policy of the Michigan Department of Education that no person on the basis of race, color, religion, national origin or ancestry, age, gender, height, weight, marital status, or disability shall be subjected to discrimination in any program, service, or activity for which it is responsible, or for which it receives financial assistance from the U. S. Department of Education. For further information, contact the Civil Rights Coordinator, Office of Career and Technical Education, P.O. Box 30712, Lansing, MI 48909. (517) 241-2091.

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