



What skills can graduates gain?

Graduates in this field will gain a range of skills, including:

- **Technical skills:** Proficiency in using surveying instruments and software.
- **Mathematical skills:** Strong understanding of geometry, trigonometry, and statistics.
- **Problem-solving skills:** Ability to identify and solve complex surveying problems.
- **Communication skills:** Effective communication with clients and team members.
- **Teamwork skills:** Ability to work collaboratively in a team environment.
- **Attention to detail:** High level of accuracy and precision in measurements.
- **Time management skills:** Ability to complete projects within deadlines.
- **Customer service skills:** Ability to provide excellent service to clients.
- **Leadership skills:** Ability to lead and manage a team of surveyors.
- **Project management skills:** Ability to plan, execute, and monitor surveying projects.
- **Health and safety skills:** Knowledge of safety protocols and procedures.
- **Environmental awareness:** Understanding of the impact of surveying on the environment.
- **Professionalism:** Adherence to industry standards and codes of conduct.
- **Continuous learning:** Commitment to staying up-to-date with the latest surveying technologies and techniques.

Applied learning

Applied learning is a key component of the surveying curriculum, providing students with hands-on experience in the field. This includes:

- **Fieldwork:** Practical exercises in using surveying instruments and techniques in real-world settings.
- **Case studies:** Analysis of real-world surveying projects and challenges.
- **Industry visits:** Opportunities to visit surveying firms and gain insight into the profession.
- **Guest lectures:** Invitations from industry experts to share their knowledge and experience.
- **Workshops:** Hands-on sessions focused on specific surveying tasks or technologies.
- **Competitions:** Participation in surveying competitions to test skills and knowledge.
- **Capstone projects:** Large-scale projects that require the application of all learned skills.

What do employers look for?

Employers in the surveying industry look for graduates who possess the following skills and attributes:

- **Technical proficiency:** Strong skills in using surveying instruments and software.
- **Mathematical aptitude:** Ability to perform complex calculations and data analysis.
- **Attention to detail:** High level of accuracy and precision in measurements.
- **Problem-solving skills:** Ability to identify and solve complex surveying problems.
- **Communication skills:** Effective communication with clients and team members.
- **Teamwork skills:** Ability to work collaboratively in a team environment.
- **Time management skills:** Ability to complete projects within deadlines.
- **Customer service skills:** Ability to provide excellent service to clients.
- **Leadership skills:** Ability to lead and manage a team of surveyors.
- **Project management skills:** Ability to plan, execute, and monitor surveying projects.
- **Health and safety awareness:** Knowledge of safety protocols and procedures.
- **Professionalism:** Adherence to industry standards and codes of conduct.
- **Continuous learning:** Commitment to staying up-to-date with the latest surveying technologies and techniques.

*World Economic Forum: <https://www.weforum.org/agenda/2023/05/future-of-job-skills-2023/>

How can these skills be developed?

These skills can be developed through a combination of formal education, practical experience, and continuous learning. Key methods include:

- **Formal education:** Pursuing a degree in surveying or a related field.
- **Practical experience:** Gaining hands-on experience through fieldwork, internships, or apprenticeships.
- **Continuous learning:** Staying up-to-date with the latest surveying technologies and techniques through workshops, seminars, and conferences.
- **Professional development:** Obtaining professional certification or membership in a surveying association.
- **Self-directed learning:** Utilizing online resources, textbooks, and manuals to learn new skills.
- **Collaborative learning:** Working with peers and mentors to share knowledge and experiences.
- **Problem-solving exercises:** Engaging in challenging projects and exercises to develop critical thinking and problem-solving skills.
- **Communication training:** Participating in workshops and courses to improve communication skills.
- **Teamwork exercises:** Engaging in group projects and exercises to develop teamwork skills.
- **Time management training:** Participating in workshops and courses to improve time management skills.
- **Customer service training:** Participating in workshops and courses to improve customer service skills.
- **Leadership training:** Participating in workshops and courses to develop leadership skills.
- **Project management training:** Participating in workshops and courses to develop project management skills.
- **Health and safety training:** Participating in workshops and courses to develop health and safety awareness.
- **Professionalism training:** Participating in workshops and courses to develop professionalism.

Where have graduates been employed?

Graduates in this field have been employed in a wide range of sectors and roles, including:

- **Government:** Working for government departments and agencies, such as the Department of Infrastructure and Planning.
- **Private industry:** Working for private surveying firms and engineering consultancies.
- **Construction:** Working for construction companies as site surveyors or quantity surveyors.
- **Infrastructure:** Working for infrastructure organizations, such as the Transport Infrastructure Authority.
- **Academia:** Working as lecturers or researchers in universities and research institutions.
- **Research and development:** Working in research and development roles for surveying equipment manufacturers.
- **Consulting:** Working as consultants for various organizations, providing surveying and engineering services.
- **Entrepreneurship:** Starting their own surveying or engineering businesses.
- **Public sector:** Working for public sector organizations, such as local government or housing authorities.
- **International organizations:** Working for international organizations, such as the United Nations or World Bank.
- **Non-profit organizations:** Working for non-profit organizations, such as environmental or social justice groups.
- **Government contractors:** Working as government contractors, providing surveying and engineering services to the government.
- **Infrastructure contractors:** Working as infrastructure contractors, providing surveying and engineering services for infrastructure projects.
- **Construction contractors:** Working as construction contractors, providing surveying and engineering services for construction projects.
- **Academia:** Working as lecturers or researchers in universities and research institutions.
- **Research and development:** Working in research and development roles for surveying equipment manufacturers.
- **Consulting:** Working as consultants for various organizations, providing surveying and engineering services.
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- **Government contractors:** Working as government contractors, providing surveying and engineering services to the government.
- **Infrastructure contractors:** Working as infrastructure contractors, providing surveying and engineering services for infrastructure projects.
- **Construction contractors:** Working as construction contractors, providing surveying and engineering services for construction projects.

What jobs and activities might graduates do?

Environmental scientist / consultant
Environmental scientist / consultant
Environmental scientist / consultant
Environmental scientist / consultant

Graduate hydrogeologist

Graduate hydrogeologist
Graduate hydrogeologist
Graduate hydrogeologist

Examples of other job titles and careers include:

- | B
- | E
- | H
- | H
- | H
- |

Environmental scientist / consultant

Environmental scientist / consultant
Environmental scientist / consultant
Environmental scientist / consultant
Environmental scientist / consultant
Environmental scientist / consultant

Ecologist

Ecologist
Ecologist

Resource management / consents officer

Resource management / consents officer
Resource management / consents officer

Sustainability consultant / advisor

Sustainability consultant / advisor
Sustainability consultant / advisor
Sustainability consultant / advisor
Sustainability consultant / advisor

Field / laboratory technician

Field / laboratory technician
Field / laboratory technician
Field / laboratory technician

Planner, environmental planner

Planner, environmental planner
Planner, environmental planner
Planner, environmental planner

Geographical information systems (GIS) analyst

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Geographical information systems (GIS) analyst

1. The first part of the text discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the text focuses on the role of the management team in setting clear goals and objectives for the organization. It highlights that effective communication and collaboration are essential for the success of these initiatives.

3. The third part of the text addresses the need for regular monitoring and evaluation of the organization's performance. It suggests that this process should be ongoing and involve all levels of the organization to ensure that the organization remains on track and is able to adapt to changing circumstances.