



## Information media & telecommunications



## **Core Skills:**

### **IT and Networking:**

Understanding computer networks, protocols, and system administration is crucial. Familiarity with technologies such as TCP/IP, VPNs, and cloud computing can be beneficial.

### **Programming and Software Development:**

Proficiency in programming languages like Python, Java, or JavaScript is valuable, especially for roles in software development and application design.

### **Data Analysis and Analytics:**

Data is a significant part of this industry. Learn data analysis tools and techniques, such as data visualization, data mining, and machine learning.

### **Cybersecurity:**

Knowledge of cybersecurity principles and best practices is essential, especially as the industry deals with sensitive data.

### **Telecommunications Technologies:**

Understand telecommunications infrastructure, including concepts like 5G, VoIP, and fiber optics.

### **Content Creation and Multimedia:**

If you're interested in the media side of the industry, skills in video production, graphic design, or content creation are important.

**Digital Marketing:**

Digital advertising and marketing skills can be valuable, especially if you're interested in marketing roles within the industry.

**Database Management:**

Proficiency in managing and working with databases is important, as many companies in this industry deal with large amounts of data.

## **Skill tree tailored to the information media & telecommunications industry, following the levels:**

**Level 1: Foundation Skills (Information Media & Telecommunications Industry)**

**Communication Skills:** Develop effective communication skills for conveying information clearly.

Strong communication skills are vital for transmitting information within the industry and to clients.

**Technical Proficiency:** Gain a basic understanding of relevant technical tools and equipment.

Proficiency with industry-specific technologies and tools is essential for entry-level positions.

**Problem-Solving:** Develop problem-solving skills to address technical issues and challenges.

Problem-solving is key to resolving technical and operational challenges in the industry.

**Digital Literacy:** Enhance digital literacy skills for working with digital media and telecommunications technologies.

Proficiency with digital platforms and tools is essential in today's industry.

**Safety Awareness:** Understand safety protocols and best practices, especially in telecommunications installations.

Safety is crucial, particularly in telecommunications, where working with equipment at heights may be required.

**Level 2: Core Skills (Information Media & Telecommunications Industry)**

**Network Basics:** Learn the fundamentals of networking and telecommunications systems.

**Data Management:** Gain expertise in data management, storage, and retrieval.

**Multimedia Production:** Develop skills in multimedia content creation, including audio and video production.

**IT Support:** Learn to provide technical support for hardware, software, and networks.

**Information Security:** Understand the basics of information security and data protection.

**Level 3: Specialized Skills (Information Media & Telecommunications Industry)**

**Telecommunications Engineering:** Specialize in telecommunications systems design and maintenance.

**Cybersecurity:** Focus on cybersecurity practices and techniques to protect digital assets.

**Digital Content Creation:** Specialize in digital content production, including video editing or graphic design.

**Network Administration:** Become a network administrator responsible for managing IT infrastructures.

**Cloud Computing:** Gain expertise in cloud technologies and services.

#### **Level 4: Advanced Skills (Information Media & Telecommunications Industry)**

Systems Architecture: Develop skills in designing complex IT and telecommunications systems.

Project Management: Assume leadership roles in managing IT and media projects.

Data Analytics: Specialize in data analysis and interpretation for decision-making.

Information Governance: Implement information governance strategies for data compliance.

Emerging Technologies: Stay updated on emerging technologies like 5G, IoT, and AI.

#### **Level 5: Licensing and Certification (Information Media & Telecommunications Industry)**

Obtain Relevant Industry Certifications (e.g., CompTIA Network+, Certified Information Systems Security Professional).

Regulatory Compliance: Ensure compliance with industry regulations, data protection laws, and standards.

Cybersecurity Certifications: Attain cybersecurity certifications relevant to your role.

Telecommunications Licensing: If involved in telecommunications, obtain relevant telecommunications licenses.

#### **Level 6: Continuing Education and Specialization (Information Media & Telecommunications Industry)**

Continuous Learning: Stay updated on industry advancements, new technologies, and cybersecurity threats.

Advanced Education: Pursue advanced degrees (e.g., Master's in Information Systems) or specialized certifications.

Ongoing Industry Training: Attend telecommunications and IT-focused training programs, workshops, and conferences.

Specialization: Focus on a specific area within the industry, such as AI in telecommunications or media analytics.

Research and Publications: Contribute to industry knowledge through research and publications.

### **Optional Major Advice:**

Computer Science: This major provides a strong foundation in programming, algorithms, software development, and computer systems, making it suitable for roles in software development, cybersecurity, and network administration.

Information Technology (IT): IT programs cover a broad range of topics, including network management, database administration, cybersecurity, and software development. It's a versatile major that can lead to various roles within the industry.

Telecommunications Engineering: This major focuses on the design, development, and maintenance of telecommunications networks and systems. It's ideal for those interested in network infrastructure and telecommunications technologies.

Data Science/Data Analytics: These majors focus on data analysis, statistics, and machine learning. They are highly relevant for careers in data analysis and big data management within the industry.

Digital Media and Communication: This major is suitable for roles related to content creation, multimedia production, digital marketing, and public relations within the media

sector of the industry.

**Cybersecurity:** Cybersecurity programs specifically prepare students for careers in protecting information and systems from cyber threats. It's a critical field given the increasing importance of cybersecurity in the industry.

**Business Information Systems/Management Information Systems (MIS):** These majors combine business knowledge with technology skills, making them suitable for roles at the intersection of business and technology, such as IT project management or IT consulting.

**Electrical Engineering:** This major can be relevant for those interested in hardware design, telecommunications equipment, and electronics within the industry.

**Marketing or Advertising:** These majors can be beneficial for careers in digital marketing, advertising, and communications roles within the media and advertising sector of the industry.

**Multimedia Design or Graphic Design:** If you're interested in creative roles like web design, graphic design, or multimedia production, these majors can be a good fit.