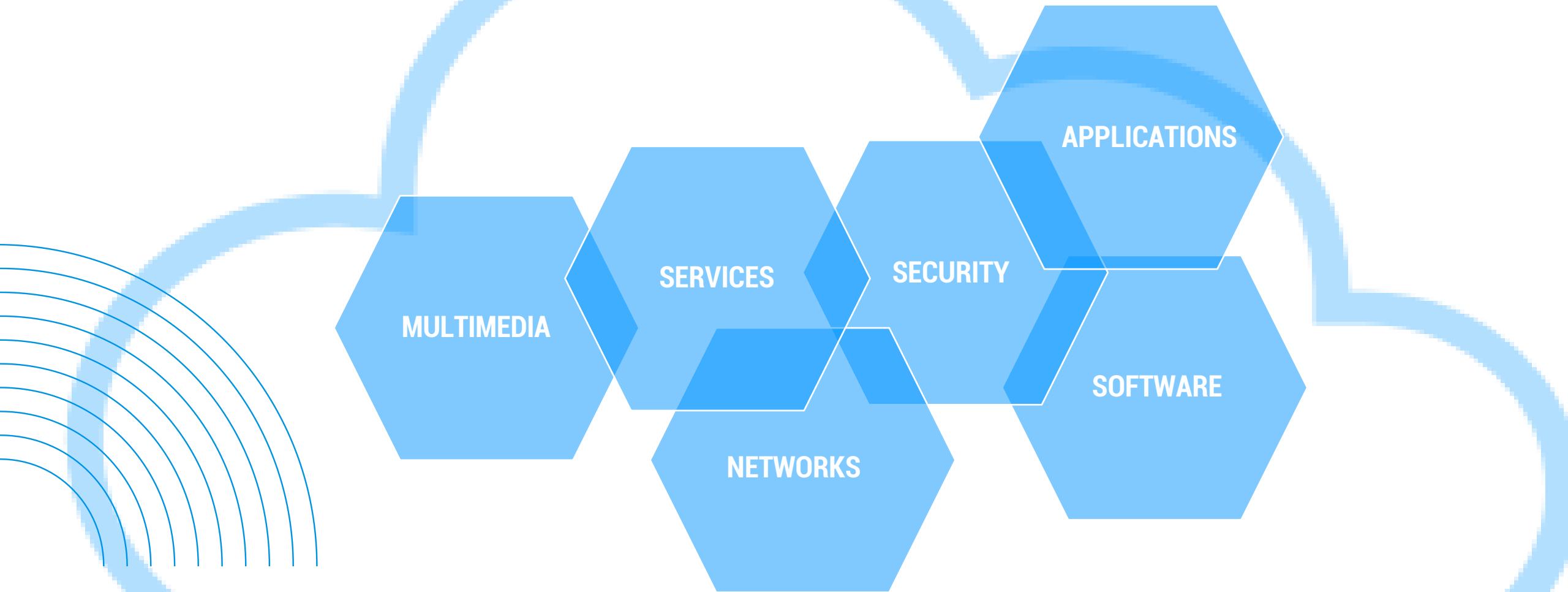


SPECIALISATION IN TELEMATICS

Vigo, July 2025

TELEMATICS Specialisation Contents



TELEMATICS Specialisation Contents

SOFTWARE

- Descentralised Programming
- Concurrent Programming
- Web Programming
- Machine Learning
- Deep Learning
- Game Theory

NETWORKS

- Internet. TCP/IP
- 5G
- Ethernet, WiFi, FTTH
- Routing, Switching
- MPLS
- VPNs
- Queueing Theory
- LPWAN, LoWPAN
- Multicast
- SDN. NFV

SECURITY

- TLS
- SSO
- Malware
- Firewall
- IDS/IPS
- Cryptography
- Digital Signature

MULTIMEDIA

- Content Delivery Networks
- QoS
- VoIP, SIP
- IPTV, OTT
- Mobile Digital Television
- Video Streaming
- IMS

SERVICES

- Microservices
- Virtualization
- Cloud Computing
- Kubernetes
- Relational Databases
- NoSQL Databases

APPLICATIONS

- Internet of Things
- Big Data
- Mobile Applications
- Intelligent Applications
- Blockchain
- eHealth
- eLearning
- eGovernment
- eCommerce

Work responsibilities

- Network engineer and administrator
- Developer of web, mobile, and intelligent applications for various fields
- Analyst and consultant in cybersecurity, CISO (Chief Information Security Officer)
- Specialist in Artificial Intelligence
- Developer of IoT solutions and specialist in embedded systems
- Head of technological projects, ICT consultant, and CTO
- Cloud solutions architect and DevOps specialist

Future of Jobs Report 2025

Fastest growing and declining jobs by 2030



| ↑ Top fastest growing jobs | ↓ Top fastest declining jobs |
|---|---|
| 1 Big data specialists | 1 Postal service clerks |
| 2 FinTech engineers | 2 Bank tellers and related clerks |
| 3 AI and machine learning specialists | 3 Data entry clerks |
| 4 Software and applications developers | 4 Cashiers and ticket clerks |
| 5 Security management specialists | 5 Administrative assistants and executive secretaries |
| 6 Data warehousing specialists | 6 Printing and related trades workers |
| 7 Autonomous and electric vehicle specialists | 7 Accounting, bookkeeping and payroll clerks |
| 8 UI and UX designers | 8 Material-recording and stock-keeping clerks |
| 9 Light truck or delivery services drivers | 9 Transportation attendants and conductors |
| 10 Internet of things specialists | 10 Door-to-door sales workers, news and street vendors, and related workers |
| 11 Data analysts and scientists | 11 Graphic designers |
| 12 Environmental engineers | 12 Claims adjusters, examiners and investigators |
| 13 Information security analysts | 13 Legal officials |
| 14 DevOps engineers | 14 Legal secretaries |
| 15 Renewable energy engineers | 15 Telemarketers |

Note: The jobs that survey respondents report the highest and lowest net growth (%) by 2030.

Source: World Economic Forum. (2025). *Future of Jobs Report 2025*.

Professional sectors

- **Technology and Communications:** Software development companies, telecommunications operators, and manufacturers of technological equipment.
- **Banking and Finance:** To ensure security, efficiency, and automation of transactions and internal networks.
- **Public Sector:** In the modernization of digital public services, data management, and protection of critical infrastructures.
- **Consulting:** Advising companies of all sizes on digital transformation and implementation of innovative technological solutions.
- **Automotive Industry:** In the development of connected vehicles and advanced driver assistance systems.
- **Energy and Environment:** In the management of smart grids, remote control systems, monitoring, and advanced telemetry.
- **Teaching and Research:** In academic institutions and R&D centers, training new professionals and developing cutting-edge technological solutions.

