

Syllabus of Digital Fluency

Sl.no	Content	Details of topic	Duration
1.	Registration	Future Skills Course Registration Process	
2.	Module 1: Emerging Technologies	<p>Overview of Emerging Technologies:</p> <ol style="list-style-type: none"> i. Artificial Intelligence, Machine Learning, Deep Learning, ii. Database Management for Data Science, Big Data Analytics, iii. Internet of Things (IoT) and Industrial Internet of Things (IIoT) iv. Cloud computing and its service models v. Cyber Security and Types of cyberattack 	05 Theory hours and 10 practical hours
3.	Module 2: Applications of Emerging Technologies	<p>Applications of emerging technologies:</p> <ol style="list-style-type: none"> i. Artificial Intelligence ii. Big Data Analytics iii. Internet of Things iv. Cloud Computing v. Cyber Security 	02 Theory hours and 4 practical hours
4.	Module 3: Building Essential Skills Beyond Technology	<p>Importance of the following:</p> <ol style="list-style-type: none"> i. Effective Communication Skills ii. Creative Problem Solving & Critical Thinking iii. Collaboration and Teamwork Skills iv. Innovation & Design Thinking v. Use of tools in enhancing skills 	03 Theory hours and 6 practical hours
5.	Module 4: Data Analysis	<ol style="list-style-type: none"> i. Data analysis, project life cycle, and Data Science in the real world. ii. Python with Data Science. iii. Data Science projects, analytics, and recommender systems. iv. Natural Language Processing and its applications. v. Microsoft Excel for data analysis and data transformation. 	03 Theory hours and 6 practical hours
6.	Module 5: Computer Networks	<ol style="list-style-type: none"> i. Introduction to computer networks, evolution of computer networks and its uses, Advantages and Disadvantages of Computer Network, reference models: OSI reference Models, TCP/IP Protocol Suit Networking fundamentals: Internet, Circuit switching vs Packet switching, ISPs, Delay and Loss in Packet Switched Networks ii. LAN Architecture, LAN topologies- Bus/ Tree LAN, Ring LAN, Star LAN, Wireless LAN, Ethernet and Fast Ethernet, Token Ring 	02 Theory hours and 4 practical hours