

## **Academic Brochure**

## **European Business School of Barcelona**

In collaboration with:









Cum Laude Award 2023:



## Welcome to ENEB

The World's Leading Business School

We are dedicated to transforming lives through highquality education. Recognized as the #1 business school by Innovatec for our technological innovation, we offer a dynamic and engaging learning environment designed to equip you with the skills to succeed in today's competitive world.

## Why ENEB?

ENEB - European Business School of Barcelona stands out as a leading institution in online education specializing in master's and postgraduate programs designed to boost your career on a global scale. With a strong international presence and courses offered in Spanish, English, and Portuguese, ENEB positions itself as the perfect choice for those seeking educational excellence without borders.

All educational programs offered by ENEB grant University Certification as they are endorsed and certified by the Isabel I University, thus validating the quality and recognition of your education internationally. Upon completing your studies, you will be eligible to receive ECTS (European Credit Transfer System).

## MAIN PARTNERS



## **TECH PARTNERS**



## + 100 PARTNERS



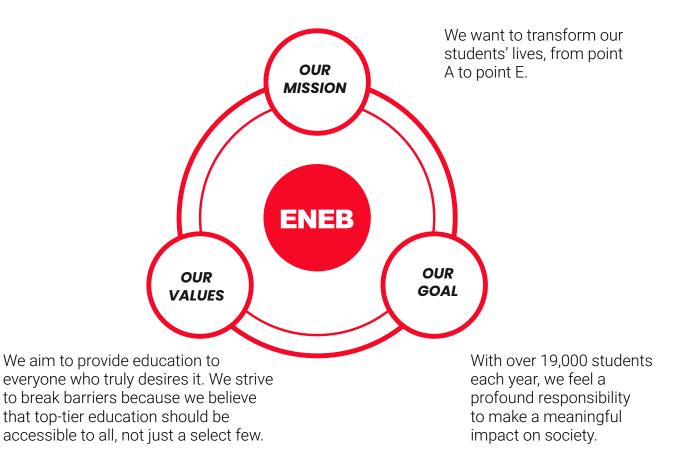






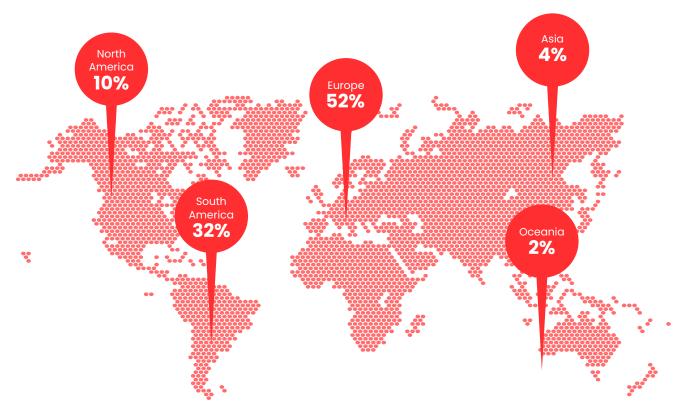
### You are our mission, our values and our goals

Our mission at ENEB is to transform your life, empowering you to choose your own path and dedicate your time to what you are most passionate about, with no limits to achieving your goals. We envision ourselves as the gateway to your life objectives, offering accessible, top-quality education for everyone. We are committed to ensuring no talent is left behind and to making a positive impact on society. With over 19,000 students annually, we feel a profound responsibility to make a real difference.



## **ENEB in the world**

At ENEB, each country represents not just a new territory, but a fresh opportunity to transform the world. Over 150,000 students across 125 countries have wisely chosen ENEB to shape their future and make a global impact.



## **ENEB in Numbers**

Numbers are not just figures; they are the result of our relentless effort and dedication. At ENEB, our impressive stats reflect our commitment to excellence and our global impact on education and transformation.



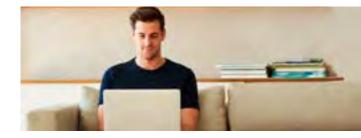
## Accreditations

All the certificates of our training programmes are issued by ENEB Business School and certified by the Universidad Isabel I, which belongs to the European Higher Education Area guaranteeing the homogeneity and quality of the training. ENEB master's and postgraduate programs have the highest recognitions, approvals and homologations that guarantee the educational quality of their content. They are highly valued professional trainings in the field of each of the different areas of knowledge. The homologations, accreditations, memberships, certifications, registrations and recognitions of ENEB are the following:



## **Remote learning**

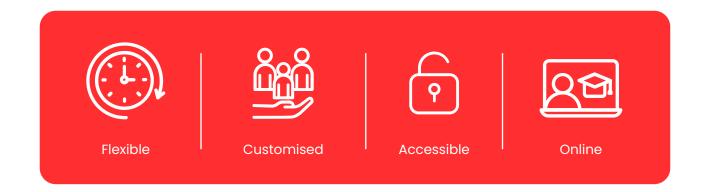
ENEB's training programs are 100% online and includes manuals, daily and voluntary live classes in the ENEB Metaverse, multimedia resources, forums, and debates within the ENEB community, as well as tutoring from Monday to Sunday.



Evaluation is done through the presentation of a final assignment per subject, after passing self-assessments. These self-assessments do not affect your final grade but help you measure your progress in learning. Final assignments are evaluated and corrected by the team of tutors and professors. There are no final tests or theoretical exams.

Flexibility is not only reflected in the delivery of assignments but also in the adaptability of the program to your needs. You can follow the order of subjects that best suits your time, needs, or concerns.

ENEB has a complete team of tutors available 7 days a week to guide and advise you on practical cases, ensuring your success in each subject.





## **Our Methodology**

At ENEB, you learn by making decisions through Harvard-backed case studies, guided by 200+ active professionals, all within our immersive Metaverse campus. Rather than focusing on memorizing information, we place the emphasis on preparing you for real-world business decisions.



## **SPECIAL PROGRAMS**

### "The Food Truck Challenge"

Simulator in which you will manage a succesfull food truck in the city of Boomtown.

You will work in teams to make decisions, after each decision there will be a debriefing and the decisions made and results obtained by each team will be discussed.

With content from Harvard Business Publishing Education.





Our synchronous live classes are held from Monday to Thursday through the ENEB Metaverse (NUBI). These classes feature the participation of experts in various educational areas. The schedule of classes may vary depending on the availability of speakers, but you will always have access to the updated calendar several weeks in advance.

Although attendance at these classes is not mandatory, they are highly recommended as they offer an interactive and practical experience on the most relevant topics of the business world in all its dimensions.

If you are unable to attend a live class, do not worry. All sessions are recorded and available on the virtual campus shortly after they take place, so you can access them at any time that suits you.

## **Flexible Learning**

#### 24/365 Access

Study at your own pace with our flexible 24/365 methodology. Whether you are a busy professional or managing other commitments, our programs are designed to fit into your life. You can start and complete your studies at your convenience, ensuring a stressfree and adaptable learning experience.

## Self-Assessment and Practical Assignments

Evaluation is done through the presentation of final assignments per subject, following self-assessments that help you measure your progress. Our flexible approach allows you to follow the order of subjects that best suits your time and needs.

### Calendar

All our Masters, Management Development Programs and Advanced Courses have a flexible start date, i.e. they begin when you wish and inform us. The duration of each of them will depend on the number of credits, ranging from 1 month for the Higher Education Courses, 5 months for the Executive Courses, 9 months for the Masters, 12 months for the Double Masters and 14 months for the Global MBA.

## Thanks to our 7/24 Method

we will answer all your questions and doubts every day of the year through the Virtual Campus.

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# What we offer:

- Welcome sessions
- Live classes from Monday to Thursday in our NUBI metaverse with active professionals
- Academic Q&A with our Secretary team in the metaverse
- Possibility of internships in companies
- Partnerships with other schools and businesses
- Registration in our job bank
- Networking opportunities and access to the ENEB Community
- Student card



## **Class President**

As part of ENEB's commitment and excellence to students around the world, all programs have Class Presidents who not only are primary guides and supporters within the institution, but also key figures in fostering a robust networking network designed to expand your professional and academic opportunities.

All students are invited to connect with them to stay abreast of the latest developments and opportunities in our academic community. These leaders will offer you valuable resources and strategic advice to maximize your potential for employability and academic success.

Connect, collaborate and grow with us!



#### Saqib Achakzai MBA

Senior Manager at Deloitte in London, he is a chartered accountant with more than fifteen years of experience in financial services. His experience includes business transformation, regulatory compliance and financial audits for clients in the UK, US and Middle East.



#### Richard Overton MBA + Master in Project Management

Chief Engineer with over 29 years of manufacturing and business management experience. Specialized in operational efficiency, safety standards and team leadership. Expert in methodologies such as FMECA, DMAIC, 5S and TPM. Known for driving efficiency and leading goal-focused teams.



#### Roner Chichirita MBA + Master in Big Data and Business Intelligence

A nurse from the Philippines working in a major German hospital, he is pursuing an MBA and a master's degree in Big Data and Business Intelligence at ENEB. His goal as Class President is to improve his leadership skills and help students. In addition, he works as a tax advisor for the Filipino community in Hamburg and enjoys building IKEA furniture and creating websites as a hobby.



#### Steven Poole MBA + Master in Logistics

Steven Poole is a recognized leader in the Australian rail industry with more than 20 years of experience. He is currently a principal investigator at Australia's largest rail operator, where he has achieved notable reductions in workplace safety incidents and injuries, as well as significant improvements in staff performance and management.



#### Samir Bouazzi MBA + Master in Team Management

An experienced IT, sales and business development professional, he holds a degree in Computer Science from Tunisia. He has managed projects on all continents and currently works as a Section Supervisor at Darwish Holding in Qatar, driving sales growth and fostering team excellence. His commitment to customer satisfaction, innovative strategies and team development make him a valuable professional to be Class President.



## What do we expect from students

Success is the result of constant effort. There are no shortcuts to excellence. Dedicate yourself fully to each task and project, and the results will speak for themselves.



"I couldn't be happier with my studies at ENEB. The online platform includes current content applicable to real-life scenarios, and the quality of the master's degree exceeded all my expectations."





"I'm impressed with the professionalism and dedication of the entire team of the school. From faculty members to administrative staff, every interaction and aspect of my experience has been excellent."

## Certifications

Here is an example of the certificates by ENEB and the University Isabel I that may be issued depending on your program of study.





## **Certificate of completion**







## Internship program

ENEB Business School is recognised by the most prestigious companies in different sectors. Its training programs, adapted to the current reality of the labour market, will allow you to get on perfectly in any company or organization and to develop a promising career. To make that possible, the school has an agreement with renowned business firms and an employment program where students can access more than 14,000 national and international job offers.

In its pursuit to promote the labour insertion of the students, ENEB Business School, among its free services, offers the possibility of undertaking internships in companies as a complement to their training plan. The objective of this internship, established through a Private Collaboration Agreement between the school and the company, is to allow training in work centres that reproduce the usual conditions of the business environment as part of their training plan.

## International character

In addition, all the students focused on international business, business sciences, management, business administration and management, can apply for an international internship through our partners Worldwide Internships and Pic-Management in the United States, Mexico, Dominican Republic, Spain, France, Thailand, China, Malaysia, United Arab Emirates and New Zealand, among others.

We provide effective solutions to the growing training needs requested by companies for their future employees. We have an avant-garde research department to update and adapt new trends to the current market as well as a networking space for the meeting of students, managers, professionals, academic experts and entrepreneurs who want to exchange experiences and opinions. Below are some of the companies and organizations where our internships take place:

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BBVA	citibank	9	E endesa	T Systems:
Ferrovial	FOX	FUJITSU	GRIFOLS	SONY
Hero	(D) ment	IBERIA	IBM	@
INDITEX	🍈 ındra	Logista	() LOGI	Telefonica
MANGO	HEDIAPHO	Nestle	TH HOTEL GROUP	e vodatone
~	🛎 PUIG	PALE ADIDAT	An Antonia Commercia	TOTEVIDNAL
	CREPTOL	Sanitas	Santander	vueling

### **Job Opportunities**

ENEB Business School is recognized by the most prestigious companies in different sectors. Its training programs, adapted to the current reality of the working world, allow students to grow professionally and climb their career ladder in any company.

To make this possible, ENEB Business School has an agreement with major business firms and employment exchanges with more than 14,000 offers available to its students within the business environment. Registration is optional, and we maintain the strictest confidentiality according to the Personal Data Protection Law in compliance with the European Regulation of Data Protection RGPD 2016/679 and RD of development 1720/2007.

Our team will advise our students on the adaptation of their curriculum and cover letters to ensure their employability in selection processes.

## Scholarships and grants

ENEB has limited places available for each of the scholarships aimed at all Master's Degree and Management Development Program students who meet the following requirements:

**Direct Scholarship:** Without requirements or limitations in each enrollment period. Get your Direct Scholarship now without administrative procedures.

#### Scholarship for Academic Excellence:

Intended for those students whose academic and professional qualifications have a profile of excellence.

#### **Entrepreneurial Talent Scholarship:**

Designed for all those entrepreneurs who wish to study a Master's or Postgraduate degree in order to apply it to their professional career.

#### Women and Equality Scholarship:

Designed for female candidates who want to grow professionally and achieve the highest level of education. In ENEB, we are committed to gender equality and we encourage woman's integration into the workforce..

#### Management Scholarship:

Intended for all those professionals whose roles of responsibility requires them to continually grow and evolve.. **Corporate Scholarship:** DIntended for all those professionals who want to boost their career and opt for higher positions.

#### Scholarship for self-employed professionals:

Intended for self-employed professional who wish to pursue a Master's or Postgraduate degree to gain an in-depth knowledge of their sector or to acquire the necessary skills to grow their business.

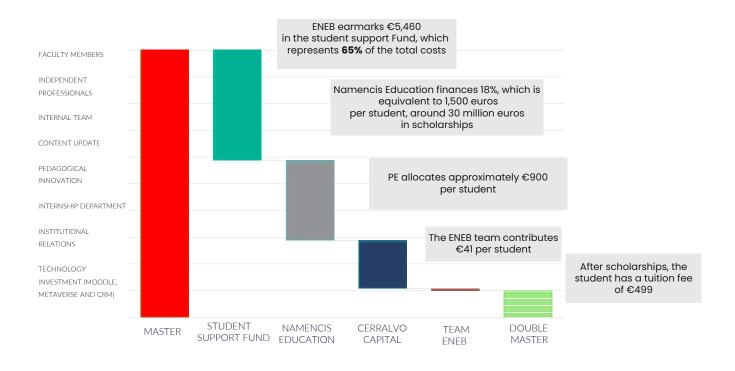
**SMEs Scholarship:** Designed for entrepreneurs who wish to increase their knowledge to contribute to the growth of their company.

**Scholarship for the unemployed:** Intended for all those who wish to pursue further studies in order to re-enter the job market.

**Geographical Mobility Scholarship:** Intended for all applicants who wish to study from anywhere in the world and thus, acquire a global view of the business world.

## We are committed to making education accessible to everyone

At ENEB, we are dedicated to democratizing education through exceptional affordability and quality. Our commitment drives us to invest in creating opportunities for every student to thrive and excel, regardless of financial constraints.





"ENEB not only offered me the chance to complete my master's degree at an unbeatable price but also provided the flexibility I needed to achieve my goals. This experience has truly transformed my life, opening doors to new opportunities and shaping my future in profound ways."

"I found everything I needed at ENEB: quality content in a format that allowed me to balance work, personal life and study, and at a price I could afford."



## MBA - MASTER OF BUSINESS ADMINISTRATION + MASTER IN BIG DATA AND BUSINESS INTELLIGENCE

#### INTRODUCTION

The MBA - Master of Business Administration + Master in Big Data and Business Intelligence is an academic program that provides advanced training in business management and data analysis technologies. This master's degree combines training in traditional business skills with specialized training in the latest trends and technologies in data analysis, such as Big Data and Business Intelligence.

Choose to train at ENEB, one of the most prominent distance business schools in Europe, allowing you to train at the highest level from anywhere, with daily support from all professors and tutors.

#### **TWO DIPLOMAS**

Upon completing your studies, you will be eligible to receive a double certification awarded by the European Business School of Barcelona, endorsed and certified by Universidad Isabel I:

MBA - Master of Business Administration + Master in Big Data and Business Intelligence

Additionally, you will obtain a Diploma of Specialization in Innovation and Project Management issued by the European Business School of Barcelona. This diploma certifies the acquisition of key competencies in these strategic areas, significantly enhancing your professional profile and improving your employment opportunities in today's competitive job market.

#### WHO IS IT FOR?

The MBA - Master of Business Administration + Master in Big Data and Business Intelligence is aimed at:

- Professionals seeking to develop leadership and business management skills, to make informed and effective strategic decisions in an increasingly competitive business environment.
- Professionals in the field of technology and IT: This program is also aimed at IT and computer science
  professionals who wish to acquire skills in Big Data and Business Intelligence to enhance their technical
  skills and advance their careers.
- Entrepreneurs and business leaders looking to improve their business management skills and gain knowledge on how to use Big Data and Business Intelligence to make informed decisions.
- Marketing and sales professionals looking to better understand customer data and use it to develop effective marketing strategies.
- College graduates seeking a career in business management, technology or data analytics.

#### **OBJECTIVES**

The curriculum of the MBA - Master of Business Administration + Master in Big Data and Business Intelligence aims to provide students with the following knowledge and skills:

- Acquire advanced knowledge in areas such as finance, marketing, human resources and business strategy.
- Develop skills in business management and data analysis technologies, such as Big Data and Business Intelligence.
- Know the main concepts and tools of data analysis and their application in business management.
- To learn how to manage and optimize the use of data to improve the efficiency and competitiveness of companies.
- Acquire an international business perspective and develop intercultural skills.
- Learn to make strategic business decisions and solve complex problems in the business sector.
- Develop skills in managing risks associated with data analysis and privacy.
- Know and apply the latest trends in data analysis technology and Business Intelligence.
- Learn to manage and lead teams in the business and data analysis sector.
- Prepare to lead in the business and data analytics sector and in the global economy. Practically apply
  various analytical techniques to implement them in a business to meet current demand in the business
  sector.

#### CAREER OPPORTUNITIES

- Data Analytics Manager: An MBA with a specialization in Big Data and Business Intelligence provides advanced skills in business data management and analytics, which can be valuable for companies looking to better understand their operations and improve their decision-making. A data analytics manager may be responsible for leading the team that uses advanced data analysis techniques to identify patterns and trends and provide recommendations to improve business efficiency, profitability and performance.
- Business Consultant: An MBA with a specialization in business administration and management
  provides strong skills and knowledge in business strategy, finance, marketing, human resources and
  operations. A business consultant can help companies develop effective business strategies, improve
  their operational efficiency, implement new technologies, and optimize their human resource
  management. Specialization in Big Data and Business Intelligence can be especially valuable for
  business consultants working on enterprise data analytics projects.
- Business Data Analyst: An MBA with a specialization in Big Data and Business Intelligence provides advanced skills in business data management and analysis, which can be valuable for companies seeking to better understand their operations and improve their decision making. A business data analyst can be responsible for collecting, analyzing and visualizing data to help companies identify patterns and trends, improve operational efficiency and make informed decisions.

#### **ADMISSION**

To be eligible for any of our Master's programs, applicants must meet the following requirements:

- Hold a degree in any field (Bachelor's, Architecture, Higher or Technical Engineering, Licentiate, Diploma, or equivalent).
- University students currently pursuing a degree or equivalent higher education studies.
- Professionals with career prospects in their current positions.

• If you do not meet any of the above conditions, please contact the school, and the admissions department will evaluate your specific case.

#### YOUR MASTER INCLUDES:

- MBA Master of Business Administration + Master in Big Data and Business Intelligence
- Diploma of Specialization in Innovation and Project Management
- Registration in our job bank
- Possibility of internships in companies
- Tutorials from Monday to Sunday
- 7" tablet as a gift

#### **SECTION 1: MARKETING**

Topic 1. New role of the consumer Topic 2. The brand Topic 3. The ideal customer Topic 4. The customer journey Topic 5. Types of marketing

#### **SECTION 2: E-COMMERCE**

Topic 1. Online sales Topic 2. Web store Topic 3. Mobile applications Topic 4. From interested lead to buyer Topic 5. Web analytics Topic 6. User experience Topic 7. Digital campaigns Topic 8. Mobile payment Topic 9. Landing page

#### **SECTION 3: OPERATIONS MANAGEMENT**

Topic 1. Business Strategy Topic 2. Operations Management Topic 3. Demand Topic 4. Product development Topic 5. Operating systems Topic 6. Process planning and management Topic 7. Operational planning Topic 8. The human factor in operations management

#### **SECTION 4: DIGITAL TRANSFORMATION**

Topic 1. Business digitalization Topic 2. Artificial Intelligence (AI) Topic 3. The Internet of Things (IoT) Topic 4. Blockchain Topic 5. Big Data and Business Intelligence (BI) Topic 6. Cloud computing Topic 7. Industrial automation and robotics Topic 8. Cybersecurity

#### SECTION 5: BUSINESS PLAN

Topic 1. Vision, mission and values Topic 2. Strategic plan Topic 3. Business model Topic 4. Strategic analysis Topic 5. Monitoring the strategic plan

#### SECTION 6: PROJECT MANAGEMENT

Topic 1. Project management figure Topic 2. Team management Topic 3. Team management and communication Topic 4. Project management

#### **SECTION 7: DECISION MAKING**

**SYLLABUS** 

Topic 1. Problem definition Topic 2. Selection of criteria and techniques Topic 3. Development of alternatives Topic 4. Analysis Topic 5. Decision Topic 6. Action plan Topic 7. Examples of problems

#### **SECTION 8: STRATEGIC PEOPLE MANAGEMENT**

Topic 1. Strategic management in human resources Topic 2. Strategic communication Topic 3. Organizational culture Topic 4. Business ethics Topic 5. Labor flexibility

#### SECTION 9: ACCOUNTING MANAGEMENT

Topic 1. The Balance Sheet Topic 2. The profit and loss statement Topic 3. Cash flow statements Topic 4. Journal entries Topic 5. Advanced accounting Topic 6. Taxes

#### SECTION 10: MANAGEMENT ACCOUNTING

Topic 1. Cost accounting Topic 2. Management Accounts Topic 3. Working capital Topic 4. Net financial debt

#### **SECTION 11: BIG DATA**

Topic 1. Introduction to big data Topic 2. Big data in projects Topic 3. Agile methodologies Topic 4. Artificial Intelligence Topic 5. Use cases in industry

#### SECTION 12: BUSINESS INTELLIGENCE

Topic 1. Introduction to business intelligence Topic 2. Business intelligence systems Topic 3. Design of reports, dashboards and KPIs Topic 4. Data sources Topic 5. Data quality

#### **SECTION 13: DATA MANAGEMENT**

Topic 1. Open data Topic 2. Data management Topic 3. Data privacy Topic 4. Data storage Topic 5. Strategy and data

## SECTION 14: PYTHON, CARTO, POWER BI AND GOOGLE DATA STUDIO

Topic 1. Interpretation of data Topic 2. Interactive visualization with Python Topic 3. Introduction to Carto Topic 4. Microsoft Power BI Topic 5. Google Data Studio

#### **SECTION 15: DATABASES**

Topic 1. Database fundamentals Topic 2. Database technology Topic 3. SQL Practice (MySQL) Topic 4. SQL Practice (MySQL) Topic 5. NoSQL practice (Hbase) Topic 6. Databases for networks Topic 7. Databases in the cloud

#### SECTION 16: DATA ANALYSIS AND INTERPRETATION

Topic 1. Data representation Topic 2. Measurements Topic 3. Regression and correlation Topic 4. Probability Topic 5. Distributions Topic 6. Confidence intervals Topic 7. Introduction to Hypothesis Testing Topic 8. Statistics with R

#### SECTION 17: ARTIFICIAL INTELLIGENCE

Topic 1. Introduction to data analysis with Python Topic 2. Introduction to machine learning Topic 3. Supervised machine learning Topic 4. Unsupervised machine learning Topic 5. Reinforcement learning Topic 6. Deep Learning Fundamentals

#### SECTION 18: STORAGE TECHNOLOGIES FOR BIG DATA

Topic 1. Apache Hadoop

Topic 2. The Hadoop Ecosystem

Topic 3. Apache Spark

Topic 4. Streaming Technologies

Topic 5. File systems and platforms for big data in the cloud

#### A JOURNEY THROUGH THE SYLLABUS

#### **SECTION 1: MARKETING**

Marketing is essential for business success, focusing on creating value for customers and achieving business goals. This section explores foundational and advanced concepts in marketing.

#### **Topic 1: New Role of the Consumer**

This topic examines how the role of consumers has evolved in the digital age. Historically, consumers were passive recipients of marketing messages, but now they are active participants in the marketing process. With access to vast information and tools, consumers can compare products, share reviews, and influence brand perceptions through social media and online communities. This shift impacts how businesses approach marketing strategies, emphasizing the need for engagement, transparency, and personalized experiences.

#### **Topic 2: The Brand**

Branding is crucial for differentiating products and building customer loyalty. This topic explores the concept of a brand, which includes not just a logo or name but also the overall perception and emotional connection a consumer has with a company. Key aspects include brand identity, brand equity, and brand positioning. Effective branding creates a unique presence in the market, influences customer choices, and can lead to a strong, lasting market position.

#### **Topic 3: The Ideal Customer**

Identifying the ideal customer involves defining the target audience most likely to benefit from and engage with your products or services. This topic covers techniques for developing customer personas, analyzing customer demographics, psychographics, and behaviors to tailor marketing strategies. Understanding the ideal customer helps businesses focus their marketing efforts, create relevant messages, and meet customer needs more effectively.

#### **Topic 4: The Customer Journey**

The customer journey is the complete experience a customer has with a brand, from initial awareness to post-purchase evaluation. This topic explores each stage of the customer journey, including awareness, consideration, decision, and post-purchase behavior. Businesses analyze these stages to understand customer motivations, optimize touchpoints, and improve the overall experience to enhance satisfaction and drive repeat business.

#### **Topic 5: Types of Marketing**

Marketing encompasses various strategies and channels. This topic introduces different types of marketing, such as digital marketing, content marketing, influencer marketing, and direct marketing. Understanding these types allows businesses to select the most effective methods for reaching their target audience, achieving marketing goals, and adapting to market trends.

#### **SECTION 2: E-COMMERCE**

E-commerce is a rapidly growing field that involves buying and selling products and services online. This section covers various aspects of managing and optimizing online business operations.

#### **Topic 1: Online Sales**

Online sales involve the process of selling products or services over the internet. This topic covers ecommerce platforms, sales strategies, and the importance of having a user-friendly online store. Effective online sales strategies include optimizing product listings, providing secure payment options, and employing techniques to drive traffic to the online store.

#### **Topic 2: Web Store**

A web store is the online platform where businesses conduct sales transactions. This topic covers the design and management of web stores, including user interface design, product catalog management, and the integration of payment gateways. Key considerations include creating an appealing, easy-to-navigate site that offers a seamless shopping experience.

#### **Topic 3: Mobile Applications**

Mobile applications provide a platform for users to access services and products from their smartphones. This topic explores the development and benefits of mobile apps for e-commerce, including features like push notifications, personalized offers, and mobile-optimized shopping experiences. Mobile apps can enhance customer engagement and facilitate easier transactions.

#### **Topic 4: From Interested Lead to Buyer**

Turning leads into customers involves nurturing potential buyers through the sales funnel. This topic covers techniques for converting leads into sales, including lead qualification, relationship building, and targeted marketing efforts. Effective strategies may involve follow-up communications, personalized offers, and addressing potential objections.

#### **Topic 5: Web Analytics**

Web analytics involves collecting and analyzing data from online interactions. This topic covers tools and techniques for measuring web traffic, user behavior, and campaign effectiveness. Key metrics include page views, conversion rates, and bounce rates, which help businesses make data-driven decisions to improve their online presence.

#### **Topic 6: User Experience**

User experience (UX) focuses on creating positive interactions for users of websites and apps. This topic covers UX principles, including usability, accessibility, and design aesthetics. A good UX ensures that users can easily navigate a site or app, find what they need, and complete transactions smoothly.

#### **Topic 7: Digital Campaigns**

Digital campaigns are marketing efforts conducted through online channels. This topic explores the creation and management of digital marketing campaigns, including campaign planning, execution, and performance measurement. Effective campaigns use channels like social media, email marketing, and online advertising to achieve specific business objectives.

#### **Topic 8: Mobile Payment**

Mobile payment systems allow users to make transactions through mobile devices. This topic covers various mobile payment technologies, such as digital wallets and mobile banking apps, and examines their security features and user adoption trends. Mobile payments offer convenience and can drive sales for e-commerce businesses.

#### **Topic 9: Landing Page**

A landing page is a standalone web page designed to convert visitors into leads or customers. This topic covers best practices for designing effective landing pages, including compelling headlines, clear calls to action, and minimal distractions. Well-designed landing pages can significantly improve conversion rates for marketing campaigns.

#### **SECTION 3: OPERATIONS MANAGEMENT**

Operations management focuses on optimizing business processes to improve efficiency and effectiveness. This section covers strategic and tactical aspects of managing operations.

#### **Topic 1: Business Strategy**

Business strategy defines a company's long-term goals and the plans to achieve them. This topic covers strategic planning processes, including vision setting, goal formulation, and competitive analysis. A well-defined business strategy aligns resources and efforts towards achieving key objectives and gaining a competitive advantage.

#### **Topic 2: Operations Management**

Operations management involves overseeing the production of goods and services. This topic covers key concepts such as process design, quality management, and supply chain coordination. Effective operations management ensures that products and services are delivered efficiently, meet quality standards, and satisfy customer needs.

#### **Topic 3: Demand**

Understanding demand is crucial for managing production and inventory. This topic explores demand forecasting techniques, including quantitative methods (like time series analysis) and qualitative approaches (like market research). Accurate demand forecasting helps businesses plan production schedules, manage inventory levels, and align resources.

#### **Topic 4: Product Development**

Product development involves creating new products or improving existing ones. This topic covers stages of the product development lifecycle, including idea generation, concept testing, design, and launch. Successful product development requires market research, innovation, and iterative testing to meet customer needs and market demands.

#### **Topic 5: Operating Systems**

Operating systems manage and coordinate business processes and resources. This topic covers types of operating systems used in businesses, including manufacturing systems, service systems, and information systems. Understanding these systems helps optimize operations, improve efficiency, and support business objectives.

#### **Topic 6: Process Planning and Management**

Process planning and management involve designing and overseeing business processes. This topic covers techniques for process mapping, process improvement, and process optimization. Effective process management ensures that business processes are efficient, cost-effective, and aligned with strategic goals.

#### **Topic 7: Operational Planning**

Operational planning translates strategic goals into actionable plans. This topic explores techniques for developing operational plans, including setting objectives, defining tasks, and allocating resources. Operational planning ensures that day-to-day activities support long-term business strategies.

#### **Topic 8: The Human Factor in Operations Management**

The human factor in operations management focuses on how people impact operational success. This topic covers aspects of workforce management, including motivation, team dynamics, and leadership. Understanding the human element helps create a productive work environment and effective management practices.

#### **SECTION 4: DIGITAL TRANSFORMATION**

Digital transformation involves integrating digital technologies into all aspects of business to drive growth and innovation. This section covers key technologies and their impacts on business practices.

#### **Topic 1: Business Digitalization**

Business digitalization involves adopting digital tools and technologies to transform operations and business models. This topic explores the benefits of digitalization, including increased efficiency, enhanced customer experiences, and new revenue opportunities. Digitalization helps businesses stay competitive in a rapidly evolving market.

#### **Topic 2: Artificial Intelligence (AI)**

Al refers to technologies that enable machines to perform tasks requiring human intelligence. This topic covers Al techniques, including machine learning, natural language processing, and robotics, and explores their applications in business, such as automating processes, analyzing data, and enhancing decision-making.

#### Topic 3: The Internet of Things (IoT)

IoT connects devices and systems to collect and exchange data. This topic covers IoT technologies, including sensors, networks, and data analytics, and examines applications in various industries, such as smart homes, industrial automation, and healthcare.

#### **Topic 4: Blockchain**

Blockchain is a decentralized ledger technology that ensures secure and transparent transactions. This topic covers the fundamentals of blockchain, including its structure, consensus mechanisms, and applications in areas like finance, supply chain management, and digital contracts.

#### Topic 5: Big Data and Business Intelligence (BI)

Big Data refers to large, complex data sets, while BI involves analyzing data to make informed decisions. This topic explores techniques for collecting, processing, and analyzing big data, and using BI tools to generate insights and support business strategies.

#### **Topic 6: Cloud Computing**

Cloud computing provides on-demand access to computing resources over the internet. This topic covers cloud services, including IaaS, PaaS, and SaaS, and explores their benefits for businesses, such as scalability, cost savings, and flexibility.

#### **Topic 7: Industrial Automation and Robotics**

Industrial automation uses technology to control manufacturing processes. This topic covers automation systems, including robotics, sensors, and control systems, and examines their role in increasing efficiency, reducing costs, and improving product quality.

#### **Topic 8: Cybersecurity**

Cybersecurity involves protecting digital systems and data from threats. This topic covers cybersecurity principles, including threat detection, risk management, and data protection strategies, and explores best practices for safeguarding information and ensuring business continuity.

#### **SECTION 5: BUSINESS PLAN**

A business plan outlines a company's strategy and operational plans. This section covers the components of a business plan and how to create a comprehensive plan for business success.

#### **Topic 1: Vision, Mission, and Values**

Vision, mission, and values define a company's purpose and guiding principles. This topic explores how to articulate a vision statement that defines long-term goals, a mission statement that outlines the company's objectives, and core values that guide decision-making and behavior.

#### **Topic 2: Strategic Plan**

A strategic plan outlines the long-term goals and the strategies to achieve them. This topic covers the development of a strategic plan, including setting objectives, analyzing market conditions, and creating actionable plans to meet business goals.

#### **Topic 3: Business Model**

A business model describes how a company creates, delivers, and captures value. This topic explores different business models, including subscription services, freemium models, and direct sales, and examines how to design and evaluate a business model that supports business objectives.

#### **Topic 4: Strategic Analysis**

Strategic analysis involves assessing internal and external factors affecting a business. This topic covers tools and techniques for analyzing market trends, competitive landscapes, and internal capabilities, including SWOT analysis and PESTEL analysis.

#### **Topic 5: Monitoring the Strategic Plan**

Monitoring the strategic plan involves tracking progress and making adjustments. This topic explores methods for measuring performance against strategic goals, including setting KPIs, reviewing progress, and making course corrections to ensure the plan remains effective.

#### SECTION 6: PROJECT MANAGEMENT

Project management involves planning, executing, and overseeing projects to achieve specific objectives. This section covers project management methodologies and practices.

#### **Topic 1: Project Management Figure**

The project management figure is responsible for leading and overseeing projects. This topic covers the roles and responsibilities of project managers, including planning, coordinating, and ensuring successful project outcomes.

#### **Topic 2: Team Management**

Team management involves leading and motivating team members. This topic covers techniques for building effective teams, managing team dynamics, and fostering collaboration to achieve project goals.

#### **Topic 3: Team Management and Communication**

Effective communication is crucial for successful team management. This topic explores communication strategies, including regular meetings, feedback mechanisms, and conflict resolution, to ensure clear and efficient interactions among team members.

#### **Topic 4: Project Management**

Project management encompasses the processes and techniques used to manage projects. This topic covers project management methodologies, including Agile, Waterfall, and Scrum, and explores best practices for planning, executing, and closing projects.

#### **SECTION 7: DECISION MAKING**

Decision making involves choosing the best course of action from available options. This section covers techniques and frameworks for making informed decisions.

#### **Topic 1: Problem Definition**

Defining the problem is the first step in the decision-making process. This topic explores methods for identifying and articulating problems, including problem statement development and root cause analysis.

#### **Topic 2: Selection of Criteria and Techniques**

Choosing criteria and techniques helps evaluate options. This topic covers methods for selecting decision criteria, including cost-benefit analysis, decision matrices, and scenario planning, to assess potential solutions.

#### **Topic 3: Development of Alternatives**

Generating alternatives involves creating different solutions to address the problem. This topic explores techniques for brainstorming and evaluating alternative solutions, including creative thinking methods and feasibility assessments.

#### **Topic 4: Analysis**

Analyzing alternatives involves comparing and evaluating potential solutions. This topic covers analytical techniques, including quantitative analysis, risk assessment, and decision modeling, to determine the best course of action.

#### **Topic 5: Decision**

Making the decision involves choosing the best alternative. This topic covers decision-making techniques, including decision trees, multi-criteria decision analysis, and consensus-building strategies.

#### **Topic 6: Action Plan**

An action plan outlines the steps to implement the decision. This topic covers the development of action plans, including setting objectives, defining tasks, and allocating resources to ensure successful implementation.

#### **Topic 7: Examples of Problems**

Examining real-world problems helps understand decision-making challenges. This topic explores case studies and examples of problems, including decision-making scenarios and lessons learned from past experiences.

#### **SECTION 8: STRATEGIC PEOPLE MANAGEMENT**

Strategic people management focuses on aligning human resources with business goals. This section covers approaches for managing and developing the workforce.

#### **Topic 1: Strategic Management in Human Resources**

Strategic HR management aligns HR practices with business objectives. This topic covers techniques for integrating HR strategies with overall business goals, including workforce planning, talent management, and performance measurement.

#### **Topic 2: Strategic Communication**

Strategic communication involves planning and delivering messages to achieve business objectives. This topic covers communication strategies, including internal communication, external communication, and crisis management.

#### **Topic 3: Organizational Culture**

Organizational culture shapes the work environment and influences behavior. This topic explores the elements of organizational culture, including values, norms, and practices, and examines how to create and sustain a positive culture.

#### **Topic 4: Business Ethics**

Business ethics involves making moral decisions in business practices. This topic covers ethical principles, including corporate social responsibility, ethical decision-making frameworks, and the role of ethics in maintaining business integrity.

#### **Topic 5: Labor Flexibility**

Labor flexibility refers to adapting the workforce to changing needs. This topic explores flexible work arrangements, including part-time work, remote work, and contract work, and examines their impact on productivity and employee satisfaction.

#### SECTION 9: ACCOUNTING MANAGEMENT

Accounting management involves overseeing financial reporting and analysis. This section covers fundamental accounting concepts and practices.

#### **Topic 1: The Balance Sheet**

The balance sheet provides a snapshot of a company's financial position. This topic covers the structure of the balance sheet, including assets, liabilities, and equity, and explores how to analyze financial health through balance sheet metrics.

#### **Topic 2: The Profit and Loss Statement**

The profit and loss statement shows a company's financial performance over a period. This topic covers the components of the profit and loss statement, including revenues, expenses, and net income, and explores how to interpret financial results.

#### **Topic 3: Cash Flow Statements**

Cash flow statements track the flow of cash into and out of a company. This topic covers the components of the cash flow statement, including operating, investing, and financing activities, and examines how to analyze cash flow for financial management.

#### **Topic 4: Journal Entries**

Journal entries record financial transactions in accounting systems. This topic covers the principles of journal entries, including debits, credits, and the use of ledgers, and explores how to record and classify transactions accurately.

#### **Topic 5: Advanced Accounting**

Advanced accounting covers complex accounting issues and practices. This topic explores topics such as consolidation, international accounting standards, and complex financial transactions, providing a deeper understanding of advanced accounting concepts.

#### **Topic 6: Taxes**

Taxes are a critical aspect of financial management. This topic covers tax principles, including tax planning, compliance, and reporting, and explores the impact of taxes on financial decisions and strategies.

#### SECTION 10: MANAGEMENT ACCOUNTING

Management accounting supports internal decision-making through financial analysis and reporting. This section covers advanced accounting techniques and concepts.

#### **Topic 1: Cost Accounting**

Cost accounting focuses on analyzing and controlling costs. This topic covers cost accounting methods, including job costing, process costing, and activity-based costing, and explores how to use cost information for budgeting and performance evaluation.

#### **Topic 2: Management Accounts**

Management accounts provide financial information for decision-making. This topic covers the preparation and analysis of management accounts, including performance reports, variance analysis, and financial planning.

#### **Topic 3: Working Capital**

Working capital management involves managing short-term assets and liabilities. This topic covers techniques for optimizing working capital, including cash management, inventory control, and accounts receivable and payable management.

#### **Topic 4: Net Financial Debt**

Net financial debt measures a company's financial obligations. This topic covers methods for calculating net financial debt, including analyzing debt levels, managing financial risks, and assessing a company's financial stability.

#### **SECTION 11: BIG DATA**

Big Data refers to the vast amounts of data generated and analyzed for insights. This section covers concepts and applications of big data technologies.

#### **Topic 1: Introduction to Big Data**

Big Data involves large and complex data sets that require advanced tools and techniques for analysis. This topic covers the characteristics of Big Data, including volume, variety, velocity, and veracity, and explores its significance for businesses.

#### **Topic 2: Big Data in Projects**

Big Data applications in projects involve using data to drive project success. This topic explores how to integrate Big Data into project planning and execution, including data collection, analysis, and decision-making.

#### **Topic 3: Agile Methodologies**

Agile methodologies support flexible and iterative project management. This topic covers Agile practices, including Scrum and Kanban, and explores how these methodologies apply to Big Data projects for adaptive and efficient project management.

#### **Topic 4: Artificial Intelligence**

Artificial Intelligence (AI) leverages data for intelligent decision-making. This topic covers AI techniques relevant to Big Data, including machine learning algorithms, natural language processing, and their applications in data analysis.

#### **Topic 5: Use Cases in Industry**

Big Data use cases demonstrate real-world applications. This topic explores examples of Big Data implementations in various industries, such as healthcare, finance, and retail, illustrating how data-driven insights lead to business improvements.

#### SECTION 12: BUSINESS INTELLIGENCE

Business Intelligence involves analyzing data to support business decisions. This section covers BI concepts and tools for effective data analysis.

#### **Topic 1: Introduction to Business Intelligence**

Business Intelligence (BI) encompasses technologies and practices for data analysis. This topic covers the fundamentals of BI, including data warehousing, data mining, and BI tools for generating business insights.

#### **Topic 2: Business Intelligence Systems**

BI systems support data collection, analysis, and reporting. This topic explores BI system components, including data sources, ETL processes, and BI platforms, and examines how to implement and use these systems for decision support.

#### Topic 3: Design of Reports, Dashboards, and KPIs

Designing reports, dashboards, and KPIs involves creating tools for data visualization and performance measurement. This topic covers best practices for designing effective reports, dashboards, and KPIs to communicate data insights and track performance.

#### **Topic 4: Data Sources**

Data sources provide the foundation for BI activities. This topic explores various data sources, including internal systems, external databases, and open data sources, and examines how to collect and integrate data for BI purposes.

#### **Topic 5: Data Quality**

Data quality ensures the reliability of BI insights. This topic covers techniques for assessing and improving data quality, including data validation, data cleansing, and ensuring accuracy, completeness, and consistency.

#### **SECTION 13: DATA MANAGEMENT**

Data management involves the processes for handling data effectively. This section covers strategies and practices for managing data assets.

#### **Topic 1: Open Data**

Open Data refers to publicly available data. This topic explores the concept of open data, including its benefits, sources, and how businesses can use open data for innovation and analysis.

#### **Topic 2: Data Management**

Data management involves organizing, storing, and maintaining data. This topic covers data management practices, including data governance, data modeling, and database administration.

#### **Topic 3: Data Privacy**

Data privacy focuses on protecting personal information. This topic covers data privacy regulations, such as GDPR and CCPA, and explores strategies for ensuring data protection and compliance.

#### Topic 4: Data Storage

Data storage solutions support data archiving and access. This topic covers various data storage options, including on-premises storage, cloud storage, and hybrid solutions, and examines factors for selecting appropriate storage methods.

#### **Topic 5: Strategy and Data**

Data strategy aligns data management efforts with business goals. This topic covers the development of a data strategy, including defining objectives, establishing data governance frameworks, and aligning data initiatives with business priorities.

#### SECTION 14: PYTHON, CARTO, POWER BI, AND GOOGLE DATA STUDIO

This section covers tools and technologies for data analysis and visualization.

#### **Topic 1: Interpretation of Data**

Data interpretation involves analyzing and drawing conclusions from data. This topic explores techniques for interpreting data, including statistical analysis, data visualization, and identifying trends and patterns.

#### **Topic 2: Interactive Visualization with Python**

Python offers libraries for creating interactive data visualizations. This topic covers Python libraries, such as Matplotlib and Plotly, for developing interactive charts and graphs to represent data insights.

#### **Topic 3: Introduction to Carto**

Carto is a platform for creating spatial data visualizations. This topic covers the basics of Carto, including how to create maps, analyze spatial data, and use Carto for location-based data analysis.

#### **Topic 4: Microsoft Power BI**

Power BI is a tool for data visualization and business intelligence. This topic covers Power BI features, including data modeling, report creation, and dashboard development for business analytics.

#### **Topic 5: Google Data Studio**

Google Data Studio is a tool for creating reports and dashboards. This topic covers Google Data Studio features, including report creation, data integration, and visualization techniques for presenting data insights.

#### **SECTION 15: DATABASES**

Databases are systems for storing and managing data. This section covers fundamental and advanced database concepts and practices.

#### **Topic 1: Database Fundamentals**

Database fundamentals cover the basic concepts of database systems. This topic explores database structures, including tables, relationships, and schemas, and examines database management systems (DBMS).

#### **Topic 2: Database Technology**

Database technology includes the tools and platforms used for database management. This topic covers different types of databases, including relational databases (MySQL) and NoSQL databases (HBase), and explores their features and applications.

#### Topic 3: SQL Practice (MySQL)

SQL (Structured Query Language) is used for managing relational databases. This topic covers SQL queries and operations, including data retrieval, manipulation, and database management tasks using MySQL.

#### Topic 4: SQL Practice (MySQL)

In-depth SQL practice continues the exploration of MySQL queries and database management techniques. This topic covers advanced SQL topics, such as joins, subqueries, and complex queries for managing and analyzing data.

#### Topic 5: NoSQL Practice (HBase)

NoSQL databases handle large volumes of unstructured data. This topic covers HBase, a NoSQL database, including its architecture, data model, and practical applications for managing big data.

#### **Topic 6: Databases for Networks**

Databases for networks support distributed and networked data environments. This topic covers network database models, data sharing, and synchronization techniques for managing data across multiple locations.

#### **Topic 7: Databases in the Cloud**

Cloud databases offer scalable data storage solutions. This topic covers cloud database services, including deployment models, cloud database platforms, and considerations for managing cloud-based databases.

#### SECTION 16: DATA ANALYSIS AND INTERPRETATION

Data analysis and interpretation focus on extracting meaningful insights from data.

#### **Topic 1: Data Representation**

Data representation involves visualizing data for analysis. This topic covers methods for representing data through charts, graphs, and tables to communicate findings and support decision-making.

#### **Topic 2: Measurements**

Measurements involve quantifying data attributes. This topic covers types of measurements, including nominal, ordinal, interval, and ratio scales, and explores their applications in data analysis.

#### **Topic 3: Regression and Correlation**

Regression and correlation analyze relationships between variables. This topic covers regression techniques for predicting outcomes and correlation methods for assessing relationships between variables.

#### **Topic 4: Probability**

Probability theory is used for making predictions based on data. This topic covers probability concepts, including probability distributions, events, and statistical inference techniques.

#### **Topic 5: Distributions**

Data distributions describe how data values are spread. This topic explores different types of distributions, including normal, binomial, and Poisson distributions, and their applications in statistical analysis.

#### **Topic 6: Confidence Intervals**

Confidence intervals estimate the range within which a parameter lies. This topic covers methods for calculating confidence intervals, interpreting results, and applying intervals for decision-making.

#### **Topic 7: Introduction to Hypothesis Testing**

Hypothesis testing evaluates assumptions about data. This topic covers hypothesis testing procedures, including formulating hypotheses, conducting tests, and interpreting results for statistical significance.

#### **Topic 8: Statistics with R**

R is a programming language for statistical analysis. This topic covers R programming for data analysis, including data manipulation, statistical techniques, and data visualization using R.

#### SECTION 17: ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) explores technologies that mimic human intelligence.

#### **Topic 1: Introduction to Data Analysis with Python**

Python is a tool for data analysis and AI. This topic covers Python libraries for data analysis, including NumPy, Pandas, and Scikit-learn, and explores techniques for data manipulation and analysis.

#### **Topic 2: Introduction to Machine Learning**

Machine Learning (ML) involves algorithms that learn from data. This topic covers ML concepts, including supervised and unsupervised learning, and explores basic algorithms and applications.

#### **Topic 3: Supervised Machine Learning**

Supervised Machine Learning uses labeled data for training. This topic covers supervised learning techniques, including classification and regression algorithms, and explores their applications for predictive modeling.

#### **Topic 4: Unsupervised Machine Learning**

Unsupervised Machine Learning analyzes unlabeled data. This topic covers techniques for clustering and dimensionality reduction, and explores applications for discovering patterns and insights from data.

#### **Topic 5: Reinforcement Learning**

Reinforcement Learning involves training models through rewards and penalties. This topic covers reinforcement learning algorithms, including Q-learning and policy gradients, and explores applications in game playing and decision-making.

#### **Topic 6: Deep Learning Fundamentals**

Deep Learning uses neural networks for complex tasks. This topic covers the basics of deep learning, including neural network architectures, training techniques, and applications in image recognition and natural language processing.

#### SECTION 18: STORAGE TECHNOLOGIES FOR BIG DATA

This section covers technologies and methods for managing and storing large-scale data.

#### Topic 1: Apache Hadoop

Apache Hadoop is a framework for processing Big Data. This topic covers Hadoop's architecture, including HDFS (Hadoop Distributed File System) and MapReduce, and explores its applications for data processing and storage.

#### Topic 2: The Hadoop Ecosystem

The Hadoop Ecosystem includes tools and technologies for Big Data. This topic explores ecosystem components such as Hive, Pig, and HBase, and examines how they work together for data processing and analysis.

#### **Topic 3: Apache Spark**

Apache Spark is a fast data processing engine. This topic covers Spark's architecture, including RDDs (Resilient Distributed Datasets) and Spark SQL, and explores its use for Big Data analytics and processing.

#### **Topic 4: Streaming Technologies**

Streaming technologies handle real-time data processing. This topic covers technologies such as Apache Kafka and Spark Streaming, and explores their applications for real-time data ingestion and analysis.

#### Topic 5: File Systems and Platforms for Big Data in the Cloud

Cloud platforms offer scalable solutions for Big Data storage and processing. This topic covers cloudbased file systems and platforms and explores their features and benefits.