



D.A.V. COLLEGE, JALANDHA



MICROSOFT & VALUE ADDED- SKILL BASED COURSES

(Under the aegis of Training & Placement Cell)

SYLLABUS

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Microsoft Course: Introduction to Cloud Infrastructure

Syllabus

- Describe cloud computing
- Describe the benefits of using cloud services
- Describe cloud service types
- Describe the core architectural components of Azure
- Describe Azure compute services
- Describe Azure networking services
- Describe Azure storage services
- Describe Azure identity, access, and security
- Describe cost management in Azure
- Describe features and tools in Azure for governance and compliance
- Describe features and tools for managing and deploying Azure resources
- Describe monitoring tools in Azure

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Microsoft Course: Introduction to AI in Azure

Syllabus

- Introduction to AI concepts
- Introduction to generative AI and agents
- Introduction to natural language processing concepts
- Introduction to AI speech concepts
- Introduction to computer vision concepts
- Introduction to AI-powered information extraction concepts
- Get started with AI in Azure
- Get started with generative AI and agents in Azure
- Get started with text analysis in Azure
- Get started with speech in Azure
- Get started with computer vision in Azure
- Get started with AI-powered information extraction in Azure

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Microsoft Course: Introduction to Finance in Dynamics 365

Syllabus

- Describe reporting and integration capabilities in Dynamics 365 finance and operations apps
- Describe shared features in Dynamics 365 finance and operations apps
- Describe Dynamics 365 Finance core capabilities
- Describe general ledger and cash and bank management processes in Dynamics 365 Finance
- Describe accounts payables and receivables in Dynamics 365 Finance
- Describe expense tracking, asset control, and budgeting processes in Dynamics 365 Finance

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Microsoft Course: Introduction to Service in Dynamics 365

Syllabus

- Describe the foundations of Dynamics 365 customer engagement apps
- Explore self-service capabilities in Dynamics 365
- Explore case management in Dynamics 365 Contact Center
- Describe workforce management in Dynamics 365 Contact Center
- Utilize onsite service capabilities in Dynamics 365 Field Service
- Describe shared capabilities in Dynamics 365 customer engagement apps

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Microsoft Course: Transform Business Workflows with Generative AI

Syllabus

- What is generative AI?
- Employ Copilot Chat as your AI assistant
- Draft and refine business content using Microsoft 365 Copilot
- Analyze and visualize data using Microsoft 365 Copilot
- Manage meetings and collaboration using Microsoft 365 Copilot
- Define the role you want Microsoft 365 Copilot to play in your business workflow

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Department of Commerce

VALUE ADDED COURSE: Computerised Accounting (CATPRO & Tally)

Syllabus

Topics

1. Firm/Company, Masters (Stock, ledger and others) Creation
2. Invoicing
3. Procurement
4. Journal Entries
5. Debit/Credit Note
6. Inventory Management
7. RCM Entries
8. Trade Receivable/Payable
9. Expenses
10. Bank Statement and BRS
11. Financial Statements and Closing of BOA
12. MIS Reports
13. Books and Registers
14. Reconciliation and Reporting

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Department of Computer Science

VALUE ADDED COURSE: Artificial Intelligence & Machine Learning

Syllabus

Unit-I

Understanding Artificial Intelligence (AI), Artificial Intelligence terminology and tools, Branches of AI-Machine Learning (ML), Deep Learning, Reinforcement Learning, Merits and Demerits of AI

First Contact with Machine Learning, Machine Learning terminology and tools, Types of Machine Learning Algorithms and their applications, Supervised Vs Unsupervised Learning, training Machine Learning models, Train and test split in ML

Unit-II

Setting of Python environment, Introduction to Python NumPy, Pandas, Matplotlib, Seaborn and Scikit-Learn

Classification Vs Clustering Vs Prediction, Applications of Classification in ML, Applications of Clustering in ML, Application of Prediction in ML

Unit-III

Basics of Linear Regression and its applications in everyday life, Use of Python to perform Linear regression on simple problems

Clustering Algorithms-An insight, K-means clustering Algorithm and its applications

Unit-IV

Concepts of Artificial Neural Networks, Neural Network Terminology, Use of Python to implement Neural Networks for predication in simple problems

AI Chatbots and recommendation engines, The Brilliance and Weirdness of ChatGPT

DAV College Jalandhar
Department of Mathematics
VALUE ADDED COURSE: Quantitative Aptitude & Reasoning
Syllabus

UNIT-I

Puzzles: Linear 2 row circular or square sitting arrangements, Floor based questions, Scheduling, Tabulation. Inequalities: Direct/Coded, Syllogism.

UNIT-II

Series: Alphanumeric, Number of arrangements, Blood relation, Alphabet test. Direction, Distance and Train related questions

UNIT-III

Arithmetic word problems: Time and work. Age. Simple and Compound interest, Partnership. Averages, Boat stream. Time-Distance, Permutation and Combination.

UNIT-IV

Approximation and Simplification: BODMAS, Fractions, Cubes, Squares, and square root. Data interpretation: Pie charts/Bar graphs. Quadratic equations, Data Sufficiency.

DAV College Jalandhar
Multidisciplinary
VALUE ADDED COURSE: Nail Art & Makeup Learning
Syllabus

Course Content

1. Learning of Nail Extensions
 - a) Temporary
 - Pressons Business
 - Shelloc
 - b) Permanent
 - Acrylic Nails.
 - Gel (builders/hard)
 - Sculpture
2. 30+ Nail Art Choices, Designs (Trending, Chorme, Cat eye etc.)
3. 7 types of different Nail Shapes
4. Removal/Filling

DAV College Jalandhar
Department of Computer Science
VALUE ADDED COURSE: Digital Marketing with AI
Syllabus

Phase 1: Social Media & Content Mastery

Chapter 1: Social Media Architecture & Algorithms

- Understanding how Instagram, TikTok, and LinkedIn algorithms prioritize content.
- The Psychology of Scrolling: Why users click.
- Setting up Business vs. Creator accounts correctly.

Chapter 2: The Content Factory & Copywriting

- The AIDA (Attention, Interest, Desire, Action) formula for captions.
- Creating Content Pillars: Educational, Promotional, and Engagement-driven.
- Video Scripting for Reels and Short-form video.

Chapter 3: Visual Branding & AI Creativity

- Design basics for non-designers using Canva.
- AI Integration: Using tools to generate realistic product backgrounds and high-quality marketing images.
- Maintaining brand consistency (Fonts, Colors, Voice).

Chapter 4: Paid Social - Meta Ads (Part 1)

- Introduction to Ads Manager (Account structure).
- Choosing the right Objective: Traffic vs. Awareness vs. Engagement.
- Audience Targeting: Age, Gender, Location, and Detailed Interests.

Chapter 5: Paid Social - Meta Ads (Part 2: Advanced)

- The Facebook Pixel and Conversion API (Tracking users).
- Retargeting: Showing ads to people who visited your site but didn't buy.
- A/B Testing: How to test two different ads to see which wins.

Phase 2: Search Engine Supremacy

Chapter 6: Search Engine Optimization (On-Page SEO)

- How Google works (Crawling & Indexing).
- Keyword Research: Using tools to find what customers are searching for.
- Optimizing Titles, Meta Descriptions, and H1 tags.

Chapter 7: Technical & Off-Page SEO

- Website speed, Mobile-friendliness, and Sitemaps.
- The Power of Backlinks: How to get other websites to vouch for you.

- Domain Authority: How to make your website "Trustworthy" in Google's eyes.

Chapter 8: Local SEO & Google Business Profile

- Dominating the "Near Me" searches.
- Setting up and optimizing a Google Business Profile (GMB).
- Review Management: How to handle 5-star and 1-star reviews.

Chapter 9: Search Engine Marketing (Google Ads - Search)

- Introduction to Pay-Per-Click (PPC).
- Writing winning Search Ads.
- Understanding Bidding Strategies: How much should you pay for a click?

Chapter 10: Google Display & YouTube Ads

- Visual Advertising across the web.
- Video Marketing: Running ads before and during YouTube videos.
- Targeting by Intent: Reaching people who are actively looking to buy.

Phase 3: Conversions, Analytics & Strategy

Chapter 11: Website Strategy & Landing Pages

- The difference between a Website and a Landing Page.
- Conversion Rate Optimization (CRO): Making sure visitors actually buy.
- Heatmaps: Seeing where users click on your page.

Chapter 12: Email & WhatsApp Marketing Automation

- Building an Email List (Lead Magnets).
- Creating Automated Sequences: Welcome emails and Abandoned Cart reminders.
- WhatsApp Business: Broadcasts vs. Chatbots.

Chapter 13: Influencer Marketing & Digital PR

- How to vet an influencer (Spotting fake followers).
- Negotiating deals and tracking ROI.
- Digital PR: Getting mentioned in news blogs and online magazines.

Chapter 14: Data Analytics & Performance Metrics

- Reading the Dashboard: Google Analytics 4 (GA4) basics.
- Understanding ROAS (Return on Ad Spend) and CAC (Customer Acquisition Cost).
- How to create a weekly marketing report that proves success.

Chapter 15: The 360° Digital Strategy (Grand Finale)

- Integrating all channels: How Social, Search, and Email work together.
- Budget Allocation: Where to put the money first?
- Final Project: Students build a complete digital marketing blueprint for a real-world brand.