

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

Criteria 1

Curricular Aspects

Metric	Number of value-added courses for imparting
1.3.2	transferable and life skills offered during last five years
1.3.2.1	How many new value-added courses are added within the last five years.

Supporting Documents

1	Brochure or any other document relating to value added
I	courses (Year : 2019-20)

<u>INDEX</u>

Criteria 1.3.2- Number of value-added courses for imparting transferable and life skills

Sr. No.	Course Name	Page No.
1.	Basic Pneumatics & Electro Pneumatics	2-5
2.	AWS Academy Cloud Architecting	6-11
3.	Quantitative Aptitude and Logical Reasoning	12-14
4.	Aptitude Building and Soft Skill Development	15-18
5.	CCNA Routing and Switching: Introduction to Networks	19-21
6.	Student Development Program	23-25
7.	Bridge Course on Communication Skills-I (1st Sem MBA)	27-30
8.	Bridge Course on English Language and Communication(1st Sem BBA)	31-33
9.	Bridge Course on Language Accuracy and Appropriacy (3rd Sem BBA)	34-37
10.	Bridge Course on Academic Writing, Research & Communication Skills (5th Sem BBA)	38-40

Faculty of Technology & Engineering



Experience center for Applied Industrial Mechatronics

CERTIFICATE PROGRAM

ON

"BASICPNEUMATICS& ELECTRO PNEUMATICS"



INTRODUCTION:

The word 'Pneuma' means breath of air. Pneumatics is application of compressed air in automation. A pneumatic system is a system that uses compressed air to transmit and control energy. In Pneumatic control, compressed air is used as the working medium, normally at a pressure from 6 bar to 8 bar. Using Pneumatic control, maximum force up to 50 KN can be developed. Actuation of the controls can be manual, Pneumatics or Electrical actuation. Signal medium such as compressed air at pressure of 1-2 bar can be used [Pilot operated Pneumatics] or Electrical signals [D.C. or A.C. source – 24V-230V] can be used [Electro Pneumatics].

Objectives

• Enabling students to integrate pneumatic and Electro-pneumatics components into a unique system in an industrial environment.

Contents

Sr. No.	Contents	Total Hours: 30
1	Introduction to pneumatic control systems	1.5 Hours
2	Pneumatic valves	3 Hours
3	Compressed air preparation	1.5 Hours
4	Pneumatic cylinders	1.5 Hours
5	Pneumatic compressors	1.5 Hours
6	Introduction to Electro-pneumatics-I	1.5 Hours
7	Introduction to Electro-pneumatics-II	1.5 Hours
8	Hand on training	
	• Direct and indirect control of a single-acting cylinder and double-acting cylinder	3 Hours
	Speed control of a single and double-acting cylinder	1.5 Hours
	Position dependent control of a double acting cylinder with mechanical limit switches	1.5 Hours
	• Sequential control of two double acting cylinders without overlapping signals	1.5 Hours
	• Time-dependent and pressure dependent control of one double- acting cylinder	1.5 Hours
	• Sequential control of two double-acting cylinders with signal overlapping, change over valves	1.5 Hours
	• Command-variable control of a single-acting cylinder and double acting cylinder with spring return valve	1.5 Hours
	Holding-element control of a double-acting cylinder with impulse valve, directly and relay based controlled	1.5 Hours
	Basic circuit with AND function, OR function and latching	1.5 Hours
	• Displacement-dependent control and stop control of a double- acting cylinder with one electric limit switch	1.5 Hours
	• Time-dependent control of one double-acting cylinder with switch-on/off delay	1.5 Hours

Outcomes

On successful completion of this course, student should be able to:

- Read, design, assemble and test basic pneumatic circuit with manual operation and with pneumatic operated.
- Read, design, assemble and test basic Electro-pneumatics circuit operated with solenoid valves and sensors.

Dr. Vijay Chaudhary

Dr. Villay Chaudhais

LACS, MED

HOD, MED



Certificate program on Basic Pneumatics and electro-pneumatics

3 | Page

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Technology & Engineering Chandubhai S. Patel Institute of Technology

AWS Academy Cloud Architecting

A. Description

AWS Academy Cloud Architecting covers the fundamentals of building IT infrastructure on AWS. The course is designed to teach solutions architects how to optimize their use of the AWS Cloud by understanding AWS services and how they fit into cloud-based solutions. Although architectural solutions can differ depending on the industry, type of application, and size of the business, this course emphasizes best practices for the AWS Cloud that apply to all of them. It also recommends various design patterns to help you think through the process of architecting optimal IT solutions on AWS. Throughout the course, students will explore case studies that showcase how some AWS customers have designed their infrastructures and the strategies and services that they have implemented. Finally, this course provides opportunities for students to build a variety of infrastructures through a guided, hands-on approach.

B. Objective of the Course:

The main objectives of the course are

- Describe how cloud adoption transforms the way IT systems work
- Describe the benefits of cloud computing with Amazon Web Services
- Discuss how to design systems that are secure, reliable, high-performing, and cost efficient
- Describe principles to consider when migrating or designing new applications for the cloud
- Identify the design patterns and architectural options applied in a variety of use cases
- Define high availability, fault tolerance, and scalability
- Discuss how to avoid single points of failure
- List AWS services that have built-in fault tolerance or can be designed for fault tolerance
- Describe why load balancing is a key architectural component for AWS-powered applications
- Identify the benefits of Infrastructure as Code
- Describe how to leverage the capabilities of AWS to support automation
- Create, manage, provision, and update related resources using AWS CloudFormation
- Articulate the importance of making systems highly cohesive and loosely coupled
- Describe system coupling to support the distributed nature of applications built for the cloud
- Describe database services for storing and deploying web-accessible applications Compare structured query language (SQL) databases with NoSQL databases
- Describe how the AWS Well-Architected Framework improves cloud-based architectures

- Describe the business impact of design decisions
- Identify the design principles and best practices of the Operational Excellence pillar
- Describe how to secure data at every layer in the application
- Describe the appropriate tools and services to provide security-focused content
- Describe the design principles and best practices of the Reliability pillar.
- Select compute, storage, database, and networking resources to improve performance
- Evaluate the most important performance metrics for your applications
- Follow best practices to eliminate unneeded costs or suboptimal resources
- Troubleshoot common errors

B. Outline of the Course:

Sr. No.	Title of the Unit	Minimum Number of Hours
1	Welcome to AWS Academy Cloud Architecting	04
2	Designing Your Environment	05
3	Designing for High Availability - Section I	04
4	Designing for High Availability - Section II	04
5	Automating Your Infrastructure	03
6	Decoupling Your Infrastructure	05
7	Designing Web-Scale Media	04
8	Is Your Infrastructure Well-Architected?	1.5
9	Well-Architected Pillar 1: Operational Excellence	05
10	Well-Architected Pillar 2: Security	04
11	Well-Architected Pillar 3: Reliability	02
12	Well-Architected Pillar 4: Performance Efficiency	04
13	Well-Architected Pillar 5: Cost-Optimization	02

Total hours: 47.5

C. Detail Syllabus

1	Welcome to AWS Academy Cloud Architecting	04
	 This module provides an overview of the AWS Academy Cloud Architecting and reviews course objectives. It will walk students through the creation of their AWS accounts, used throughout the course to enhance the cloud learning journey. Upon completing this module, students will be able to: Create an AWS training portal account. 	

2	 Understand how to access course materials. Create an AWS Free Tier account and an AWS Educate account (Optional) Designing Your Environment 	05
	5 5	
	This module guides you through how architects design their Amazon Web Services, or AWS, environments. It also	
	establishes guidelines and patterns for selecting AWS	
	Regions, Availability Zones, Multi-Accounts, Multi-VPCs,	
	and subnet structures. These concepts are conveyed through	
	a mixture of recommendations, best practices, design	
	patterns, and questions meant to be used by architects to	
	determine the full requirements of their solution.	
	Upon completing this module, students will be able to:	
	• Discuss how to design systems that are secure, reliable,	
	high performing, and cost efficient.	
	• Highlight principles to consider when migrating existing	
	applications to AWS or designing new	
	applications for the cloud.	
	• Identify design patterns and architectural options that can	
	be applied in a variety of use cases.	
3	Designing for High Availability - Section I	04
	This module builds on the Designing Your Environment	
	content and explains the concepts of high availability and	
	fault tolerance. Elastic Load Balancing and Amazon Route	
	53 are discussed as options for implementing a single	
	hostname that can communicate with multiple endpoints.	
	Concepts are reinforced with an exercise to improve an	
	architecture, along with a group discussion to forklift an	
	existing application.	
	Upon completing this module, students will be able to:	
	• Define high availability, fault tolerance, and scalability, and	
	discuss how those concepts are used in cloud architecture.	
	 Discuss how to avoid single points of failure. 	
	 Identify which AWS services have built-in fault tolerance, 	
	and which services can be designed for fault tolerance.	
4	Designing for High Availability - Section II	04
	This module builds on Module 3 and explores the best	
	practices to "Avoid Single Points of Failure." Elastic Load	
	Balancing and Amazon Route 53 are further discussed and	
	concepts are reinforced with another exercise and a lab that	
	uses Auto-Scaling with AWS Lambda.	
	Upon completing this module, students will be able to:	
	• Define high availability, fault tolerance, and scalability, and	
	discuss how those concepts are used in cloud architecture.	
	• Discuss how to avoid single points of failure.	
	• Identify which AWS services have built-in fault tolerance	

	• Explain why load balancing has become a key architectural	
	component for many AWS-powered applications	
5	Automating Your Infrastructure	03
	This module provides an in-depth analysis of microservices	
	and serverless architectures to explain how they can make	
	the infrastructure more resilient and cost effective. The goal	
	of this module is to teach the fundamental concepts of these	
	non-traditional approaches to deploying applications.	
	Upon completing this module, students will be able to:	
	• Identify the benefits of Infrastructure as Code.	
	• Describe how to leverage the capabilities of Amazon Web	
	Services to support automation.	
	• Discuss to how create, manage, provision, and update a	
	collection of related AWS resources in	
	an orderly and predictable way with AWS CloudFormation.	
6	Decoupling Your Infrastructure	05
	This module teaches decoupling design patterns and the need	
	for reducing interdependencies between tiers. Students will	
	learn best practices for using microservices and designing	
	solutions with components.	
	Upon completing this module, students will be able to:	
	Articulate the importance of making systems highly	
	cohesive and loosely coupled.	
	Recall the multi-dimensional facets of system coupling to	
	• • • •	
	support the distributed nature of applications built for the cloud.	
7	Designing Web-Scale Media	04
	Module 7 answers the question "How do I make sure that I	
	-	
	am using my storage in the most efficient and available way	
	am using my storage in the most efficient and available way so that my applications run faster and my users have a better	
	am using my storage in the most efficient and available way so that my applications run faster and my users have a better experience." Students will perform a lab that implements a	
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	 so that my applications run faster and my users have a better experience." Students will perform a lab that implements a serverless architecture with AWS managed services. Upon completing this module, students will be able to: Discover database services for storing and deploying webaccessible content quickly and costeffectively. 	
	 so that my applications run faster and my users have a better experience." Students will perform a lab that implements a serverless architecture with AWS managed services. Upon completing this module, students will be able to: Discover database services for storing and deploying webaccessible content quickly and costeffectively. Identify key features and benefits of Amazon S3, 	
	 so that my applications run faster and my users have a better experience." Students will perform a lab that implements a serverless architecture with AWS managed services. Upon completing this module, students will be able to: Discover database services for storing and deploying webaccessible content quickly and costeffectively. Identify key features and benefits of Amazon S3, CloudFront, Amazon RDS, and Amazon Aurora. 	
8	so that my applications run faster and my users have a better experience." Students will perform a lab that implements a serverless architecture with AWS managed services. Upon completing this module, students will be able to: • Discover database services for storing and deploying web- accessible content quickly and costeffectively. • Identify key features and benefits of Amazon S3, CloudFront, Amazon RDS, and Amazon Aurora. • Compare structured query language—or SQL—databases	1.5
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	Architected Framework.Identify how the AWS Well-Architected Framework	
	enables you to review and improve cloudbased architectures.	
	• Reflect on the business impact of your design decisions.	
9	Well-Architected Pillar 1: Operational Excellence	05
	This module focuses on the Operational Excellence pillar of	
	the Well-Architected Framework.	
	Operational excellence is challenging to achieve in	
	traditional on-premises environments, where	
	operations is perceived as a function that is isolated and	
	distinct from the lines of business and	
	development teams that it supports. By adopting these	
	practices, you can build architectures that provide insight to their status, are enabled for effective and	
	efficient operation and event response,	
	and can continue to improve and support the goals of the	
	business.	
	Upon completing this module, students will be able to:	
	• Describe the benefits and application of the Operational	
	Excellence pillar, such as running and	
	monitoring systems that will deliver business value, and	
	continually improve processes and	
	procedures.	
	• Identify the design principles and best practices of the	
0	Operational Excellence pillar. Well-Architected Pillar 2: Security	04
	Module 10 focuses on the second pillar of the Well-	
	Architected Framework: Security. Best practices are	
	discussed, and you will learn how to secure data at every	
	layer in the application. You'll participate in	
	an exercise to recommend security enhancements in	
	accordance with the security pillar.	
	Upon completing this module, students will be able to:	
	• Describe how to secure data at every layer in the	
	application.	
	• Identify the appropriate tools and services to provide	
	security focused content.	
	• Identify the design principles and best practices of the Security pillar.	
.1	Well-Architected Pillar 3: Reliability	02
	This module highlights the third pillar of the Well-	
		1
	Architected Framework: Reliability. Best practices are	
	Architected Framework: Reliability. Best practices are	
	Architected Framework: Reliability. Best practices are shared with AWS tools to improve system reliability. You will review example architectural patterns for implementing a reliable solution and perform a Lab: Multi-Region Failover	
	Architected Framework: Reliability. Best practices are shared with AWS tools to improve system reliability. You will review example architectural patterns for implementing	

	infrastructure or service disruptions,	
	dynamically acquire computing resources to meet demand, and mitigate disruptions such as	
	misconfigurations or transient network issues.	
	e	
	• Identify the design principles and the best practices of the	
10	Reliability pillar.	04
12	Well-Architected Pillar 4: Performance Efficiency	04
	This module provides in-depth insight into the Performance	
	Efficiency pillar of the Well-Architected Framework. While	
	many best practices are discussed, this module focuses on	
	how to tune or offload components of your system to	
	improve performance. You will participate in an exercise to	
	improve an architecture.	
	Upon completing this module, students will be able to:	
	• Select compute, storage, database, and networking	
	resources to improve your architecture's	
	performance.	
	• Identify design principles that can help you achieve	
	performance efficiency.	
	• Evaluate the most important performance metrics for your	
	applications.	
13	Well-Architected Pillar 5: Cost-Optimization	02
	This module focuses on the Cost Optimization pillar of the	
	Well-Architected Framework. Discover best practices, how	
	to procure Amazon Elastic Compute Cloud instances for the	
	lowest cost, and how to analyze or audit your resources for	
	inefficient costs or budget overruns. Before finalizing, you'll	
	inefficient costs or budget overruns. Before finalizing, you'll participate in an exercise to improve an architecture.	
	participate in an exercise to improve an architecture.	
	participate in an exercise to improve an architecture. Upon completing this module, students will be able to:	
	participate in an exercise to improve an architecture.Upon completing this module, students will be able to:Understand the principles of the cost optimization pillar.	
	participate in an exercise to improve an architecture. Upon completing this module, students will be able to:	

D. Students Learning Outcomes:

- Enables you to compete in real-world tasks using all these technologies. These certifications enable the candidates with the skills of implementing and configuring the technologies in question.
- AWS certification offers administration skills, developer knowledge of specialized technologies that lead your path to success.
- The AWS certification program creates certified skilled IT professionals, it is also one of the leading certification programs for cloud computing skills.

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF TECHNOLOGY AND ENGINEERING

CHANDUBHAI S. PATEL INSTITUTE OF TECHNOLOGY

- Career Development and Placement cell introduce the course on "Quantitative Aptitude and Logical Reasoning" as a value added course. It is non-credit course. The objective of the course is to enhance the logical and soft skills of the students.
- Date and Time : 6th July, 2019 To 28th September, 2019 (Every Saturday Except third Saturday and declare holiday)
- ✤ About the course :

1. General Aptitude

- 1.1 Percentage
- 1.2 Profit Loss Discount
- 1.3 Time Speed Distance
- 1.4 Time & Work
- 1.5 Ratio Proportion
- 1.6 Allegation & Mixture
- 1.7 Permutations & Contribution
- 1.8 Probability
- 1.9 Data Interpretation
- 2. Logical Skills
 - 2.1 Blood Relation
 - 2.2 Number & Alpha Series
 - 2.3 Coding Decoding CSPIT, CHARUSAT
- 3. Soft Skill
 - 3.1 Resume Building
 - 3.2 Interview Skill, GD Skill
 - 3.3 Communication

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Technology & Engineering Chandubhai S. Patel Institute of Technology

Quantitative Aptitude and Logical Reasoning

- A. Objective of the Course: The main objectives of the course are
- The objective of the course is to enhance the candidate's aptitude. It also helps the students to find their weakness and strength.
- The students will be able to understand the importance of communication skills and this course will help them in achieving the expertise in communication skills.
- It is important for student's professional development.

B. Outline of the Course:

Sr. No.	Title of the Unit	Minimum Number of Hours
1	General Aptitude	20
2	Logical Skills	7
3	Soft Skills	5

Total hours: 32

C. Detail Syllabus

1	General Aptitude	20 Hours
1.1	Percentage	
1.2	Profit Loss Discount	
1.3	Time Speed Distance	
1.4	Time & Work	
1.5	Ratio Proportion	
1.6	Allegation & Mixtures	
1.7	Permutations & Combination	

1.8	Probability	
1.9	Data Interpretation	
2	Logical Skills	7 Hours
2.1	Blood Relations	
2.2	Number & Alpha Series	
2.3	Coding-Decoding CSPIT, CHARUSAT	
3	Soft Skills	5 Hours
3.1	Resume Building	
3.2	Interview skill, GD Skill	
3.3	Communication	

D. Instructional Method and Pedagogy:

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed.
- Lectures will be conducted with the aid of multi-media projector, black board, OHP and or Microsoft Teams.
- Attendance is compulsory.
- Assignments based on course content will be given to the students at the end of each unit/topic and will be evaluated at regular interval.

E. Students Learning Outcomes:

- The Students must at the end of the course be able to: Understand the concept communication skill and soft skill.
- Students can solve the complex problem of Quantitative aptitude and logical reasoning.

F. Recommended Study Material:

Reference Books:

1. Quantitative Aptitude by Dr. R S Aggarwal.



APTITUDE BUILDING AND SOFT SKILL DEVELOPMENT

JANUARY- MARCH 2020



Aptitude Building session By Mr. Himanshu Thakkar Director - Expert Educare Pvt Ltd.

> **Registration Link:** https://forms.gle/dv9SZo318r4vUDon8



Soft Skill Session By Dr. Kamal Chakravartty Head, HRDC, CHARUSAT

Organizer:

Career Development and Placement Cell (CDPC), Charotar University of Science and Technology(CHARUSAT),Changa





CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY AND RESEARCH

Aptitude Building and Soft Skill Development

(2019-2020)

A. Objective of the Course

The main objective of Course are:

- The objective of the course is to enhance the candidates aptitude. It also helps the students to find their weakness and strength.
- The students will be able to understand the importance of communication skills and this course will help them to achieve the expertise in communication skills.
- It is important for the students' professional development.

B. Outline of the course:

Sr. No	Title of the Unit	No. of Hours
1	Aptitude Building	30
2	Skill Mapping Session Schedule	16

C. Detailed Syllabus

Apt	Aptitude Building		
Sr N o	Topic Name	No of Hours Required	
1	Ratio and proportion & partnership	2	
2	Percentage & Profit and loss	2	
3	Progression	2	
4	Time and work	2	





5	Time and distance	2		
6	Permutation and combination	2		
7	Set theory	2		
8	Fundamentals and applications of area and volume	2		
9	Reasoning on Venn Diagram	2		
10	Analytical Reasoning	2		
11	Visual Reasoning	2		
12	Reasoning on situation handling, coding - decoding, direction senses	2		
13	Reasoning on numbers and alphabets	2		
14	Sample practice questions and explanation about approach with real examples asked in placement test of major corporates / recruiters	2		
15	Dos and Don'ts in Interview and discussion on frequently asked questions in interview	2		
Skil	I Mapping Session Schedule			
16	Communication Skill /Presentation Skill	4		
17	Teamwork Skill	2		
18	Problem Solving Skill	2		
19	Leadership Skill	2		
20	Skill To work under pressure	2		
21	Enterprise and Entrepreneurial Skill	2		
22	Analytical Skill	2		
Tota	Total Hours 46			





D. Instructional Method and Pedagogy

- At the start of course, the course delivery pattern , pre-requisite of the subject will be discussed.
- Lectures will be conducted with the aid of multi- media projector , black board , OHP and Microsoft Teams
- Attendance is Compulsory
- Assignments based on course content will be given to the students at the end of each topic

E. Students Learning Outcomes.

- The students must at the end of course be able to Understand the concept communication skills and soft skills
- Students can solve the complex problem of Quantitative aptitude and Logical Reasoning.

F. Recommended Study Material

Reference Books

1. Quantitative Aptitude by R.S. Aggrawal.

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Technology & Engineering Chandubhai S. Patel Institute of Technology

CCNA Routing and Switching: Introduction to Networks

A. Objective of the Course:

The main objectives of the course are

- Work with routers, switches and wireless devices to configure and troubleshoot VLANs, Wireless LANs and Inter-VLAN routing.
- Develop critical thinking and problem-solving skills using real equipment and Cisco Packet Tracer.
- Configure and troubleshoot redundancy on a switched network using STP and Ether Channel.
- Explain how to support available and reliable networks using dynamic addressing and first-hop redundancy protocols.
- Create and configure file systems and file system attributes, such as permissions, encryption, access control lists, and network file systems
- Deploy, configure, and maintain systems, including software installation, update, and core services
- Manage users and groups
- Manage security, including basic firewall and SELinux configuration
- Perform basic container management
- It is important for student's professional development.

B. Outline of the Course:

Sr. No.	Title of the Unit	Minimum Number of Hours
1	Explore the Network	04
2	Configure a Network Operating System	05
3	Network Protocols and Communications	04
4	Network Access	04
5	Ethernet	04
6	Network Layer	04
7	IP Addressing	03
8	Subnetting IP Networks	03
9	Transport Layer	03

10	Application Layer	03
11	Build a Small Network	03

Total hours: 40

C. Detail Syllabus

1	Explore the Network	04 Hours
	Globally connected, LANs, WANs and the Internet, The	
	Network as a platform, the changing network environment	
2	Configure a Network Operating System	05 Hours
	Introduction, IOS Bootcamp, Basic Device Configuration,	
	Address Schemes	
3	Network Protocols and Communications	04 Hours
	Rules of Communication, Network Protocols and Standards,	
	Data transfer in the network	
4	Network Access	04 Hours
	Physical layer protocols, Network Media, Data Link Layer	
	Protocols, Media Access Control.	
5	Ethernet	04 Hours
	Ethernet Protocol, LAN Switches, Address Resolution	
	Protocol	
6	Network Layer	04 Hours
	Network Layer Protocols, Routing, Routers, Configure a	
	Cisco Router.	
7	IP Addressing	06 Hours
	IPv4 Network Addresses, IPv6 Network Addresses,	
	Connectivity Verification.	
8	Subnetting IP Networks	03 Hours
0	Ŭ	05 110015
	Subnetting an IPv4 Network, Addressing Schemes, Design	
	Considerations for IPv6.	
9	Transport Layer	03 Hours
	Transport Layer Protocols, TCP and UDP.	
10	Application Layer	03 Hours
	Application Layer Protocols, Well-Known Application	
	Layer Protocols and Services.	
11	Build a Small Network	03 Hours
	Network Design, Network Security, Basic Network	
	Performance, Network Troubleshooting	
	· · · · · · · · · · · · · · · · · · ·	

D. Students Learning Outcomes:

- Students will be able to build simple LANs
- Perform basic configurations for routers and switches, and
- Implement IP addressing schemes.

Page 3 of 3

Faculty of Computer Science and Applications

Smt. Chandaben Mohanbhai Patel Institute of

Computer Applications (A Constituent Institute of CHARUSAT)



organizes

A Training Program on

Student Development Program 5th Jul, 2019 to 2-Nov -2019



Charotar University of Science and Technology Changa - 388421 Dist.: Anand, Gujarat

Overview of Program and its content

We have organized a "Student Development Program" for MCA Lateral semester – 3 and MSc. IT semester -3 students. Members of T&P are going to deliver sessions for improving their basics of object oriented, database technologies and aptitude skills from 5th Jul, 2019 to 2-Nov -2019.

Overview of the Content Covered

Numerical Aptitude: Numbers & Algebra |, Percentage, Average, Speed and Distance, Ratio and Proportion, Permutation and Combination, Object Oriented concepts and database fundamentals

Resource Persons

Dr. Jaimin N Undavia

Dr. Nilay M Vaidya

Mr. Nilay Ganatra

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Computer Science & Applications Smt. Chandaben Mohanbhai Patel Institute of Computer Applications Student Development Program

A. Objective of the Course: The main objectives of the course are

- The objective of the course is to enhance the candidate's aptitude. It also helps the students to find their weakness and strength.
- The students will be able to understand the importance of communication skills and this course will help them in achieving the expertise in communication skills.
- It is important for student's professional development.

B. Outline of the Course:

Sr. No.	Title of the Unit	Minimum Number of Hours
1	General Aptitude	22
2	Domain Fundamental	6
3	Soft Skills	4

Total hours: 32

C. Detail Syllabus

1	General Aptitude	22 Hours
1.1	Percentage	
1.2	Profit Loss Discount	
1.3	Time Speed Distance	
1.4	Time & Work	
1.5	Ratio Proportion	
1.6	Allegation & Mixtures	
1.7	Permutations & Combination	
1.8	Probability	

1.9	Data Interpretation	
2	Domain Fundamental	6 Hours
2.1	Object Oriented Concepts	
2.2	Database Fundamentals	
3	Soft Skills	4 Hours
3.1	Resume Building	
3.2	Interview skill, GD Skill	
3.3	Communication	

D. Instructional Method and Pedagogy:

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed.
- Lectures will be conducted with the aid of multi-media projector, black board, OHP and or Microsoft Teams.
- Attendance is compulsory.
- Assignments based on course content will be given to the students at the end of each unit/topic and will be evaluated at regular interval.

E. Students Learning Outcomes:

- The Students must at the end of the course be able to: Understand the concept of communication skill and soft skill.
- Students can solve the complex problem of Quantitative aptitude and logical reasoning.
- Students will be able to understand the domain fundamental course in depth.

F. Recommended Study Material:

Reference Books:

- 1. Quantitative Aptitude by Dr. R S Aggarwal.
- 2. Database Fundamentals by Navathe
- 3. Object Oriented Programming using C++ by Balaguruswami

Faculty of Management Studies



30 Hours Bridge Course to be offered to the First Semester MBA Students on

COMMUNICATION SKILLS-I

Take your Managerial Communication to the Next Level!

Division-A: August 05-10, 2019 | 30 Hours | 9:10 AM - 4:20 PM

Division-B: August 19-23, 2019 | 30 Hours | 9:10 AM - 4:20 PM

• **Objectives:** To hone basic linguistic and communication skills; learn styles of communication and gain insights into how to deal with people with different communication styles; help learners use the language effectively for various functions

Course Contents

An Introduction to Communication

• Communication: Definition, Process, Barriers; Introduction to C's of Communication; Types of Communication in the Professional World

Introduction to Listening Skills

• Listening: Need and Significance; Types of Listening; Techniques to improve Listening Skills Introduction to Reading Skills

• Introduction to the importance of Reading Skills; Reading different types of texts; Reading, Interpreting and Analyzing; Reading and Interpreting Reports and Case Studies

Introduction to Writing Skills

• Basics of good formal Writing; Good Writing Skills: Paraphrasing and Summarising; Writing for Professional purposes : Report, Emails

Presentation Skills

• Basics of Public Speaking in a formal context; Understanding the art of Good Speaking: Use of Rhetoric; Developing Effective Presentation Skills: From audience analysis to preparing effective PowerPoint presentations

Faculty Coordinator: Dr. Bhaskar Pandya (9824269101), HSS Department, I²IM



INDUKAKA IPCOWALA INSTITUTE OF MANAGEMENT (I²IM) FACULTY OF MANAGEMENT STUDIES (FMS) DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES (HSS)

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF MANAGEMENT STUDIES DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES MBA Programme A Bridge Course on Communication Skills – I

Scheme:

Semester	Course Name	Contact Hours	Marks
1	Communication Skills-1	30	100

Course Objectives:

- To hone basic linguistic and communication skills (of students) required in a business organization, namely: Listening, Speaking, Reading and Writing
- To help learners develop familiarity with varied styles of communication and gain insights into how to deal with people with different communication styles
- To help learners use the language effectively for various functions

Course Components:

Module No.	Title/Topic	Contact Sessions
1	An Introduction to Communication	04
	Communication: Definition, Process, Barriers	
	 Introduction to C's of Communication 	
	Types of Communication in the Professional World	
2	Introduction to Listening Skills	05
	Listening: Need and Significance	
	Types of Listening	
	Techniques to improve Listening Skills	
3	Introduction to Reading Skills	07
	 Introduction to the importance of Reading Skills 	
	 Reading different types of texts 	
	Reading, Interpreting and Analyzing	
	Reading and Interpreting Reports and Case Studies	
4	Introduction to Writing Skills	06
	Basics of good formal Writing	
	Good Writing Skills: Paraphrasing and Summarising	
	Writing for Professional purposes : Report, Emails	

5	Presentation Skills	08
	 Basics of Public Speaking in a formal context 	
	Understanding the art of Good Speaking: Use of Rhetoric	
	Developing Effective Presentation Skills: From audience	
	analysis to preparing effective PowerPoint presentations	
	 Managing Questions and Answers from the audience 	
	Total	30

Instruction Methods and Pedagogy

The course is based on pragmatic learning. Classroom Teaching will be facilitated by Reading Material, Classroom Discussions, Task-based learning, projects, assignments and various interpersonal activities like case-studies, critical reading, group-work/pair-work, and presentations.

Evaluation:

Students' performance in the course will be evaluated on a continuous basis through the following components:

SI. No.	Component	Number	Marks per incidence	Total Marks
1	Pre-Test	1	30	30
2	Assignments (Oral and Written)	4	10	40
3	Post-Test	1	30	30
	Total			100

Learning Outcomes:

At the end of the course, the students should have polished their grammar and developed the ability to communicate effectively in business situations, they should be able to communicate message accurately, handle situation that require thoughtful communication, to use appropriate words and tones and so on.

Reference Books:

- Sanjay Kumar and PushpLata (First Edition, 2011), *Communication Skills*, Oxford University Press, New Delhi
- Krishna Mohan and Meena Banerji (2010), *Developing Communication Skills*, Macmillan Publications India Ltd., New Delhi
- M V Rodriques (2013), *Effective Business Communication*, Concept Publishing Company (P) Ltd., New Delhi

- Mohan and Meenakshi Raman (2006), Effective English Communication Krishna, Mcgraw-Hill Publishing Company Limited, New Delhi
- Geoffrey Leech & Jan Swartvik (1994), *A Communicative Grammar of English*, Longman Publications, New York
- o Jones Leo (1979), Functions of English, Cambridge University Press, UK

Reference Reading:

- o http://www.communicationskills.co.in/index.html
- o http://www.hodu.com/default.htm
- o http://www.bbc.co.uk/worldservice/learningenglish
- o http://www.englishlearner.com/tests/test.html
- o http://www.englishclub.com/vocabulary/idioms-body.htm
- o <u>http://dictionary.cambridge.org</u>



A Bridge Course On English Language and Communication @ 1st Semester BBA (July 1-13, 2019)

This course aims at enhancing English Language and Communication of new enrolled students at the institute. Special care will be taken to LSRW Skills of Beginner Learners of English Language. This course will help you gain confidence in using English Language effectively. Timing	 The course will cover following topics: Parts of Speech Tenses and Moods Active-Passive Direct Indirect Interrogatives Introduction to Functional Communication Communication for Persona, Academic and Social Use Practice of Functional Communication 9:10 AM to 4:20 PM
Duration	30 Hours

For any query, Contact: Mr. Kaushik Trivedi (9904987756) HSS Department, I²IM



INDUKAKA IPCOWALA INSTITUTE OF MANAGEMENT (I²IM) FACULTY OF MANAGEMENT STUDIES (FMS) DEPARTMENTOF HUMANITIES AND SOCIAL SCIENCES (HSS)

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF MANAGEMENT STUDIES DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES BBA Programme A Bridge Course on English Language and Communication

Teaching Scheme:

Semester	Course Name	Contact Hours	Marks
1	English Language and Communication	30	100

Course Objectives:

- To develop familiarity with English language and communication
- To learn the basic use of language at personal, academic and professional fronts

Course Components:

Module No.	Title/Topic	Contact Sessions
1	English Language Parts of Speech	10
	Tenses and Moods	
	Active-Passive	
	Direct Indirect	
	Interrogatives	
2	Functional Communication	20
	Introduction to Functional Communication	
	Communication for Persona, Academic and Social Use	<u> </u>
	Practice of Functional Communication	
	Total	30

Instruction Methods and Pedagogy

Teaching will be facilitated by reading material, discussion, task-based learning, projects, assignments and various interpersonal activities like case studies, critical reading, group work, independent and collaborative research, presentations, etc.

Evaluation:

Students' performance in the course will be evaluated on a continuous basis through the following components:

SI. No.	Component	Number	Marks per incidence	Total Marks
1	Pre-Test	1	30	30
2	Assignments (Oral and Written)	4	10	40
3	Post-Test	1	30	30
	Total			100

Learning Outcomes:

At the end of the course, the students should have developed familiarity and orientation towards English language and basic patterns of communication.

Reference Books:

- Sanjay Kumar and PushpLata (First Edition, 2011), Communication Skills, Oxford University Press, New Delhi
- Krishna Mohan and Meena Banerji (2010), *Developing Communication Skills*, Macmillan Publications India Ltd., New Delhi
- M V Rodriques (2013), *Effective Business Communication*, Concept Publishing Company (P) Ltd., New Delhi
- Mohan and Meenakshi Raman (2006), Effective English Communication Krishna, Mcgraw-Hill Publishing Company Limited, New Delhi
- Geoffrey Leech & Jan Swartvik (1994), A Communicative Grammar of English, Longman Publications, New York
- o Jones Leo (1979), Functions of English, Cambridge University Press, UK

Reference Reading:

- o <u>http://www.communicationskills.co.in/index.html</u>
- o <u>http://www.hodu.com/default.htm</u>
- o http://www.bbc.co.uk/worldservice/learningenglish
- o http://www.englishlearner.com/tests/test.html
- o http://www.englishclub.com/vocabulary/idioms-body.htm
- o http://dictionary.cambridge.org



Indukaka Ipcowala Institute of Management (I²IM)

A Bridge Course for the 3rd Semester BBA Students

Language Accuracy and Appropriacy

Hone your Language Skills!

June 25 - July 5, 2019 | 30 Hours | 9:10 AM - 4:20 PM

A course aims to hone basic language and communication (of students) skills required for a robust academic life.

Highlights

- 30 Hours of Intensive fun filled content.
- Individual attention for all students
- Continuous Assessment through Pre-Test and Post Tests
- Module-1: Language Today
- Module-2: Basics of Language and Communication
- Module-3: Introduction to Functional English
- Module-4: Basic Writing Skills
- Module-5: Speaking Well

Faculty Coordinator: Mr. Rajanikant Vankar (9558859054) HSS Department, I²IM



INDUKAKA IPCOWALA INSTITUTE OF MANAGEMENT (I²IM) FACULTY OF MANAGEMENT STUDIES (FMS) DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES (HSS)

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF MANAGEMENT STUDIES DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES BBA Programme A Bridge Course onLanguage Accuracy and Appropriacy

Teaching Scheme:

Semester	Course Name	Contact Hours	Marks
3	Language Accuracy and Appropriacy	30	100

Course Objectives:

- To hone basic linguistic and communication skills namely: Listening, Speaking, Reading and Writing
- To help learners develop familiarity with basic language structures
- To help learners use the language effectively for various functions

Course Components:

Module No.	Title/Topic	Contact Sessions
1	An Introduction to English Language today	04
	 Need for English in the Professional World 	
	Basic Concepts of Accuracy and Appropriacy	
	 Developing basic vocabulary in English 	
2	Basics of English and Communication Skills	05
	Grammar and Common Errors in English	
	Developing reading Skills	
	Listening and Comprehension skills	
3	Introduction to Functional English	07
	Basic Greetings	
	Giving and Seeking information	
	 Developing dialogues for different contexts 	
4	Introduction to Basic Writing Skills	06
	 Basics of good writing skills 	
	Writing paragraphs and Letters	
5	Basics of Speaking Well	08

Tips to begin speaking well	
 Role of Body Language in developing confidence 	
 Speaking and presenting in groups 	
Basics to Deliver effective presentations	
Total	30

Instruction Methods and Pedagogy

The course is based on pragmatic learning. Classroom Teaching will be facilitated by Reading Material, Classroom Discussions, Task-based learning, projects, assignments and various interpersonal activities like case-studies, critical reading, group-work/pair-work, and presentations.

Evaluation:

Students' performance in the course will be evaluated on a continuous basis through the following components:

SI. No.	Component	Number	Marks per incidence	Total Marks
1	Pre-Test	1	30	30
2	Assignments (Oral and Written)	4	10	40
3	Post-Test	1	30	30
	Total			100

Learning Outcomes:

At the end of the course, the students should have polished their grammar and developed the ability to communicate effectively in business situations, they should be able to communicate message accurately, handle situation that require thoughtful communication, to use appropriate words and tones and so on.

Reference Books:

- Sanjay Kumar and PushpLata (First Edition, 2011), Communication Skills, Oxford University Press, New Delhi
- Krishna Mohan and Meena Banerji (2010), *Developing Communication Skills*, Macmillan Publications India Ltd., New Delhi
- M V Rodriques (2013), *Effective Business Communication*, Concept Publishing Company (P) Ltd., New Delhi
- o Mohan and Meenakshi Raman (2006), *Effective English Communication Krishna*, Mcgraw-Hill Publishing Company Limited, New Delhi

- Geoffrey Leech & Jan Swartvik (1994), A Communicative Grammar of English, Longman Publications, New York
- o Jones Leo (1979), Functions of English, Cambridge University Press, UK

Reference Reading:

- o http://www.communicationskills.co.in/index.html
- o http://www.hodu.com/default.htm
- o http://www.bbc.co.uk/worldservice/learningenglish
- o http://www.englishlearner.com/tests/test.html
- o http://www.englishclub.com/vocabulary/idioms-body.htm
- o http://dictionary.cambridge.org



Indukaka Ipcowala Institute of Management (I²IM)

A Bridge Course for the 5th Semester BBA Students

Academic Writing, Research & Communication Skills

Sharpen, Learn and Relearn

July 25-29, 2019 | 30 Hours | 9:10 AM - 4:20 PM

Take your Language skills to the next level. Prepare yourself to take on the academic and professional world through terrific Language Skills!!

Content:

- Module-1: Introduction to Academic Writing
- Module-2: Formal Academic Language
- Module-3: Writing for Research
- Module-4: Developing Academic Writing Skills
- Module-5: Presentation skills

Faculty Coordinator: Mr. Vijay Makwana (9998380041) HSS Department, I²IM



INDUKAKA IPCOWALA INSTITUTE OF MANAGEMENT (I²IM) FACULTY OF MANAGEMENT STUDIES (FMS) DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES (HSS)

CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF MANAGEMENT STUDIES DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES BBA Programme (5th Sem) A Bridge Course onAcademic Writing, Research & Communication Skills

Teaching Scheme:

Semester	Course Name	Contact Hours	Marks
5	Academic Writing, Research &	30	100
	Communication Skills		

Course Objectives:

- To hone and develop critical thinking and advanced writing skills for research
- To help learners develop familiarity with academic vocabulary
- To help learners use the language effectively in a formal environment.

Course Components:

Module No.	Title/Topic	Contact Sessions
1	An Introduction to Academic Writing	04
	Basics of Academic Writing : Need and Significance	
	 Developing critical Thinking for academic writing and research 	
2	Formal Language for Academic purposes	05
	Basic Language functions: Greeting and Introductions	
	 Interpretation and sharing of opinions 	
	Academic Vocabulary	
3	Writing for Research	07
	Characteristics of Research Writing	
	 Formats of documents needed for Writing for Research 	
4	Introduction to Writing Skills	08
	 Good Writing Skills: Paraphrasing and Summarizing 	
	Writing for Professional purposes : Report, Emails,	
	Abstract	
	Learn to quote and cite: Introduction to style manuals	
5	Presentation Skills	06
	Presenting in a formal context	

Preparation and Delivery in groups	
Managing Q & A	
Total	30

Instruction Methods and Pedagogy

The course is based on pragmatic learning. Classroom Teaching will be facilitated by Reading Material, Classroom Discussions, Task-based learning, projects, assignments and various interpersonal activities like case-studies, critical reading, group-work/pair-work, and presentations.

Evaluation:

Students' performance in the course will be evaluated on a continuous basis through the following components:

SI. No.	Component	Number	Marks per incidence	Total Marks
1	Pre-Test	1	30	30
2	Assignments (Oral and Written)	4	10	40
3	Post-Test	1	30	30
Total				

Learning Outcomes:

At the end of the course, the students should have polished their basic writing skills and developed the ability to communicate formally in business and academic situations, they should be able to communicate message accurately, handle situation that require thoughtful communication, to use appropriate words and tones and so on. They should be able to work on small academic projects within minimal language based guidance.

Reference Books:

Academic Writing for International Students,Routledge Academic Writing: A Guide for Management Students and Researchers. Monipally, M.M. &Pawar, B.S. Sage. 2010. NewDelhi *Effective Academic Writing Level - 1,2,3,4 (Second Edition) By:* Alice Savage, Patricia Mayer, MasoudShafiei, Rhonda Liss, & Jason Davis; *Publisher:Oxford* Writing Your Thesis (2ndEdition) by Paul Oliver,Sage