



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## List of Value Added courses conducted in the institution during the academic year 2020-21

S.No	Name of the Programme
1.	Manuscrip-logy
2.	Communication Skills
3.	Email Etiquette
4.	HR Recruitment Training
5.	Computer Application in Business
6.	Time Management
7.	S-ck Market
8.	Chartered Accountant
9.	GST
10.	Business Journalism
11.	Online Trading
12.	Cyber Security
13.	Mutual Fund Operation
14.	Bio Entrepreneurship
15.	Hands on training an Android App Development
16.	Practical course on Data Science
17.	Wi-Fi Technology
18.	Power Bi
19.	Internet of Things
20.	Mathematical Economics
21.	Preparation of Household Chemicals and Perfumes
22.	Water and soil Analysis
23.	Online Trading
24.	Mathematical Statistics
25.	Natural Language Processing



*Jar*

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAI.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956

## PERMISSION LETTER

### FROM

Mr. A.K Gowthemraj  
Head & Assistant Professor,  
Department of English  
Raak Arts and Science College,  
Perambai – 605110

### TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.  
This is bringing to your kind notice that we have planned to conduct a Value Added Course on "Email Etiquette" for I & II BA English students. This course is very useful for students to develop their knowledge about their future study. So please give the permission for the above said programs.

Thanking you

**Course Name:** "Email Etiquette"

Name of the Co-ordinator: Mr.A.K.Gowthemraj

Faithfully

Place: Perambai

Date : 26.12.2019

Yours

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
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27.12.2019

## CIRCULAR

It is hereby informed that our English department is going to conduct the value added course on "Email Etiquette" for I & II BA English students. Hence the students of Literature have to enroll their name to the course coordinator on or before 31.12.2019.

**I & II BA ENGLISH - Email Etiquette**

*Q. M. Hameed No 2.*

Principal

Copy to

1. Principal
2. Office
3. English Department



*Jar*

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## About the College

RAAK Arts and Science College was established in the year 2009; it was affiliated to Thiruvalluvar University, Vellore, Tamil Nadu, India. It started with five Under Graduate degree Programs and 180 students. Today, the college is offering more than eleven Under Graduate degree Programs, three Post Graduate Degree Programs and two Ph.D. Degree Programs. The college has been fostering graduates in Arts, Sciences, Commerce, Business Administration, Social Work, Information Technology and Computer Science. This has resulted in interdisciplinary environment that promotes cross disciplinary learning and research environment to the students. RASC is located in a green campus that has all the necessary infrastructure including laboratories, ICT classrooms, transport facilities etc.

## About the Department

English has become the official business language of the world. It is the most widely used programming, computing and digital language of the virtual world. More than 90 % of the worlds scientific literature including conference proceeding, journals and books are published in English language. It has worldwide acceptance as the commercial language for business, trade,

## AGENDA

### Day 1 to 10

Definition and importance of GD- Types of GDs (formal, informal, brainstorming, problem-solving) -Objectives and benefits of GD - Preparation for GD- Identifying and addressing conflicts- Using & statements to express opinions Understanding group behavior and dynamics- Roles and responsibilities in a group - Effective communication and conflict resolution- Building trust and rapport among group members- Practicing GD skills through case studies or scenarios -Discussing real-life scenarios and developing solutions

### Day 11 to 20

Research and gathering information on the topic Creating a list of questions and points to discuss -Organizing thoughts and ideas- Practicing active listening and asking questions- Introduction to the topic and setting the agenda- Encouraging participation and active listening -Managing time and keeping the discussion focused - Dealing with distractions and conflicts

### Day 21 to 30

Verbal communication skills (voice, tone, language) - Nonverbal communication skills (body language, facial expressions) - Active listening skills (maintaining eye contact,



RAAK ARTS AND SCIENCE COLLEGE

## RAAK ARTS AND SCIENCE COLLEGE

(A Unit of Farouk Educational Trust)

Recognized under 2(f) of UGC Act - 1956

(Affiliated to Thiruvalluvar University | ISO 9001: 2015 Certified Institution)

Perambai – 605110, Villupuram dt, Tamilnadu

## DEPARTMENT OF ENGLISH

## VALUE ADDED COURSE

Email Etiquette

FROM 02/01/2020

TO 18/02/2020

ALL ARE WELCOME

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VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

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## SYLLABUS

### Course Title: Email Etiquette

**Course Description:** The "Email Etiquette" course is designed to improve participants' professional communication skills by focusing on the principles of effective and respectful email correspondence. This course covers key topics such as crafting clear and concise messages, using appropriate tone and language, managing email threads, and understanding the importance of timely responses. Participants will also learn best practices for email formatting, attachment management, and handling sensitive information. By the end of the course, students will be equipped to communicate more efficiently and professionally through email, enhancing their overall workplace interactions and productivity.

#### Unit 1: Introduction to Email Writing (6 HOURS)

Definition of email writing- History and evolution of email writing- Importance of email writing in professional communication- Basics of email writing (e.g. format, tone, language)- Common mistakes to avoid in email writing (e.g. spelling errors, grammatical errors,

#### Unit 2: Email Writing Format and Structure (6 HOURS)

Parts of an email (subject, greeting, body, closing, signature)- Best practices for writing an effective email - Common mistakes to avoid in email writing- Strategies for editing and proofreading emails

#### Unit 3: Email Writing Styles and Tone (6 HOURS)

Formal and informal writing styles- Persuasive writing styles - Using the right tone in an email- Write an email using different writing styles (formal, informal, persuasive) - Identify and correct tone issues in an email

#### Unit 4: Email Writing for Specific Purposes (6 HOURS)

Learn how to write effective emails for specific purposes- Writing emails for formal requests – Writing emails for informal queries - Writing emails for other purposes (e.g. follow-ups, complaints)

#### Unit 5: Email Writing for Different Audiences (6 HOURS)

Understanding the audience (e.g. colleagues, clients, managers) - Writing emails for different audiences (e.g. colleagues, clients, managers)- Identify and correct common mistakes in an email



*Jar*  
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## REFERENCES

- Email Writing: Advanced" by Patrick Fitzgerald  
The Elements of Email Style: Communicate Effectively via Electronic Mail" by  
Robert Bly



*Jan.*  
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RAAK ARTS & SCIENCE COLLEGE  
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# RAAK ARTS AND SCIENCE COLLEGE

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## DEPARTMENT OF ENGLISH VALUE ADDED COURSE (2020 -2021)

### EMAIL ETIQUETTE SUMMARY REPORT

The "Email Etiquette" course aims to equip participants with the necessary skills to communicate professionally and effectively via email. Throughout the course, participants will learn the importance of clarity, tone, and professionalism in their email communications. By the end of the course, participants will have developed a thorough understanding of email etiquette principles, including proper formatting, concise writing, and timely responses. They will be able to craft emails that convey their message clearly, build positive professional relationships, and avoid common pitfalls. Overall, participants will emerge from the course with enhanced email communication skills essential for success in today's workplace.

CO-ORDINATOR

HOD



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PERAMBAL



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Annamalai University, Chidambaram || An ISO 9001:2015 Certified Institution  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

FROM

R.DEVAKI  
Head & Assistant Professor,  
Department of Business administration  
Raak Arts and Science College,  
Perambai – 605110

TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.  
This is bringing to your kind notice that we have planned to conduct Value Added Course on "STOCK MARKET" for III B.Com students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name:** STOCK MARKET  
**Name of the Co-ordinator:**

R.DEVAKI (III B.COM)

**Place:** Perambai

**Date:** 24.08.2020



Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Annamalai University, Chidambaram || An ISO 9001:2015 Certified Institution  
Recognized under section 2(f) of the UGC Act, 1956.

25.08.2020

## CIRCULAR

It is hereby informed that our Commerce Department is going to conduct the value added course on " STOCK MARKET " for III BCOM students. Hence the students of our Commerce Department have to enroll their name to the course coordinator on or before 31.08.2020

III BCOM : STOCK MARKET

*A. M. Harish Na 2.*  
Principal

Copy to

1. Principal
2. Office
- 3..Department of Commerce

*Jam.*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

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## ABOUT THE INSTITUTION

RAAK Arts and Science a Co-Education College affiliated to Thiruvalluvar University, Vellore, and Govt. of TN launched in the year 2009. We started with 5 UG courses and 180 students which have now grown up offering 12 UG courses, 7 PG Courses and 2 Ph.D., Courses with and overall strength of around 1500 students. We strive to produce graduates in different streams building strong moral values, well-disciplined with quality education to make them a complete human to face the challenges of the world with courage and commitment and help them lead a successful life building a good society.

## ABOUT THE DEPARTMENT

RAAK Arts and Science College offers B. Com. Programmes. The Department of Commerce's mission is to create the conditions for economic growth and opportunity for all communities. Through its 13 bureaus, the Department works to drive U.S. economic competitiveness, strengthen domestic industry, and spur the growth of quality jobs in all communities across the country. The Department serves as the voice of business in the Federal Government, and at the same time,

technologies such as quantum computing and artificial intelligence (AI).

## OBJECTIVE OF THE VALUE ADDED COURSE

- To improve employability skills of students.
- To bridge the skill gaps and make students industry ready.
- To provide an opportunity to students to develop inter-disciplinary skills

## ABOUT THE COURSE

The status of women in India is strongly connected to family relations. In India, the family is seen as crucially important, and in most of the country, the family unit is patrilineal. Families are usually multi-generational, with the bride moving to live with the in-laws..

- To familiarize students with the specific cultural contexts of women in India
- To Orient the students regarding Theories of Gender Relations, Position of Women in India Society
- To Imbibe knowledge about Economic



RAAK ARTS AND SCIENCE COLLEGE

**Course:**  
STOCK MARKET

**Venue:**  
**CLASS ROOM**  
Department of Commerce  
RAAK Arts & Science  
College

**Start: 03/09/2020 TO**  
**12/10/2020**

**Organized by**



**Department of Commerce**  
RAAK Arts & Science  
College  
Perambai, Villianur

**ALL ARE WELCOME**



*John*  
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# RAAK ARTS AND SCIENCE COLLEGE

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## SYLLABUS STOCK MARKET

### Unit 1: Introduction to Financial Markets

(6hr)

Overview of financial markets and their functions - Introduction to different types of financial instruments (stocks, bonds, derivatives, etc.) - Basic concepts of investment analysis and portfolio management - Introduction to market participants (investors, traders, brokers, etc.) - Regulatory framework governing financial markets

### Unit 2: Fundamental Analysis

(6hr)

Understanding financial statements (income statement, balance sheet, cash flow statement) - Financial ratio analysis to evaluate company performance and financial health - Industry analysis and competitive positioning - Economic analysis and its impact on investment decisions - Valuation techniques for stocks and other financial assets

### Unit 3: Technical Analysis

(6hr)

Principles of technical analysis and charting - Common technical indicators (moving averages, MACD, RSI, etc.) - Chart patterns and their significance in predicting price movement St rends, support, and resistance levels.

### Unit 4: Portfolio Management

(6hr)

Modern portfolio theory and the efficient frontier - Capital Asset Pricing Model (CAPM) and its applications - Diversification and risk management strategies - Asset allocation strategies based on investor objectives and risk tolerance - Performance evaluation and monitoring of investment portfolios.

### Unit 5: Derivatives and Risk Management

(6hr)

Introduction to derivatives markets (futures, options, swaps, etc.) - Pricing and valuation of derivative instruments - Hedging strategies using derivatives to manage risk exposure -



*Jar*  
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Understanding leverage and its implications in derivative trading - Regulation and oversight of derivatives markets.

## VALUE ADDED COURSE (2020 -2021)

### STOCK MARKET

### SUMMARY REPORT

The Stock Market course is designed to provide participants with a comprehensive understanding of equity markets, investment strategies, and trading techniques. Covering essential topics such as market analysis, stock valuation, portfolio management, and risk assessment, the course equips students with the tools needed to navigate the complexities of stock trading. Emphasizing both fundamental and technical analysis, participants learn how to make informed investment decisions and develop effective trading strategies. The course also addresses market psychology and behavioral finance, helping students understand the emotional aspects of trading. By the end, participants will be well-prepared to engage in stock market activities confidently and strategically, making it an invaluable resource for aspiring investors and financial professionals.

  
COURSE COORDINATOR

  
HOD



  
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PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## PERMISSION LETTER

FROM

R.DEVAKI  
Head & Assistant Professor,  
Department of Business administration  
Raak Arts and Science College,  
Perambai – 605110

TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on " AWARENESS ON CHARTERED ACCOUNTING " for II B.Com students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name:** AWARENESS ON CHARTERED ACCOUNTING

**Name of the Co-ordinator:**

R.DEVAKI (II B.COM)

**Place:** Perambai

**Date:** 01.07.2020

Yours Faithfully

**PRINCIPAL**

**RAAK ARTS & SCIENCE COLLEGE**  
**VILLIANUR POST-605 110**  
**PERAMBAL.**





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore  
Recognized under section 2(f) of the UGC Act, 1956.

02.07.2020

## CIRCULAR

It is hereby informed that our Commerce Department is going to conduct the value added course on " AWARENESS ON CHARTERED ACCOUNTING " for II BCOM students. Hence the students of our Commerce Department have to enroll their name to the course coordinator on or before 06.07.2020

II BCOM - AWARENESS ON CHARTERED ACCOUNTING

*A. H. N. S.*  
Principal

Copy to

1. Principal
2. Office
- 3..Department of Commerce



*Jam*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## ABOUT THE INSTITUTION

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## ABOUT THE DEPARTMENT

RAAK Arts and Science College offers B. Com. Programmes. The Department of Commerce's mission is to create the conditions for economic growth and opportunity for all communities. Through its 13 bureaus, the Department works to drive U.S. economic competitiveness, strengthen domestic industry, and spur the growth of quality jobs in all communities across the country. The Department serves as the voice of business in the Federal Government, and at the same time, the Department touches and serves every American every day.

technologies such as quantum computing and artificial intelligence (AI).

## OBJECTIVE OF THE VALUE ADDED COURSE

- To improve employability skills of students.
- To bridge the skill gaps and make students industry ready.
- To provide an opportunity to students to develop inter-disciplinary skills

## ABOUT THE COURSE

The status of women in India is strongly connected to family relations. In India, the family is seen as crucially important, and in most of the country, the family unit is patrilineal. Families are usually multi-generational, with the bride moving to live with the in-laws..

- To familiarize students with the specific cultural contexts of women in India
- To Orient the students regarding Theories of Gender Relations, Position of Women in India Society
- To Imbibe knowledge about Economic Development, Women and Work Force Labour



RAAK ARTS AND SCIENCE COLLEGE

Course:  
**AWARNESS ON  
CHARTERED  
ACCOUNTING**

Venue:  
**CLASS ROOM**  
Department of Commerce  
RAAK Arts & Science  
College

Start: **08/07/2020 TO  
17/08/2020**

Organized by

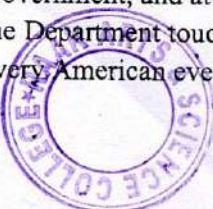


Department of Commerce  
RAAK Arts & Science  
College  
Perambai, Villianur

**ALL ARE  
WELCOME**

*Jam*

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# RAAK ARTS AND SCIENCE COLLEGE

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## SYLLABUS

### AWARNNESS ON CHARTERED ACCOUNTING

#### Unit 1: Foundation Course

(6hr)

Basics of accounting principles and concepts - Fundamentals of business mathematics and statistics - Introduction to economics and business environment - Basics of business communication and ethics - Introduction to business laws and regulatory framework.

#### Unit 2: Intermediate Course - Group I: Accounting

(6hr)

Advanced accounting principles and practices - Preparation and presentation of financial statements - Accounting for amalgamations, absorption, and reconstruction - Accounting for special transactions (consignment, joint ventures, etc.) - Corporate accounting and accounting standards

#### Unit 3: Intermediate Course - Group I: Corporate and Other Laws

(6hr)

Indian company law and regulatory framework - Securities laws and capital market regulations - Corporate governance and ethics - Laws relating to contracts, partnerships, and agencies Laws relating to taxation and intellectual property

#### Unit 4: Intermediate Course - Group II: Cost and Management Accounting

(6hr)

Cost accounting principles and techniques - Budgeting and budgetary control - Standard costing and variance analysis - Cost management and decision-making - Performance measurement and control systems

#### Unit 5: Intermediate Course - Group II: Taxation

(6hr)

Direct taxation laws and regulations- Income tax provisions for individuals, partnerships, and companies - Indirect taxation laws and regulations (GST, customs, excise) - Goods and Services Tax (GST) - principles and compliance - Tax planning and management.



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## VALUE ADDED COURSE (2020 -2021) AWARENESS ON CHARTERED ACCOUNTANT SUMMARY REPORT

The Chartered Accountant course is a comprehensive program designed to equip individuals with the knowledge and skills necessary for a successful career in accounting and finance. It covers key areas such as financial reporting, taxation, auditing, and business management, ensuring that students gain a deep understanding of accounting principles and practices. The course also emphasizes ethical standards and professional conduct, preparing graduates to navigate the complexities of the financial world. With a blend of theoretical knowledge and practical experience, the Chartered Accountant designation opens doors to various career opportunities, including roles in public accounting firms, corporate finance, and consultancy. This program is essential for anyone looking to achieve a high level of expertise and recognition in the accounting profession.

**COURSE COORDINATOR**

**HOD**



**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

FROM

R.DEVAKI  
Head & Assistant Professor,  
Department of Business administration  
Raak Arts and Science College,  
Perambai – 605110

TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "GOODS AND SERVICE TAX" for I B.Com students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name:** GOODS AND SERVICE TAX

**Name of the Co-ordinator:**

R.DEVAKI (I B.COM)

**Place:** Perambai

**Date:** 2.06.2020

Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

04.06.2020

## CIRCULAR

It is hereby informed that our Commerce Department is going to conduct the value added course on " GOODS AND SERVICE TAX " for I BCOM students. Hence the students of our Commerce Department have to enroll their name to the course coordinator on or before 07.06.2020

I BCOM - GOODS AND SERVICE TAX

*A. M. Harindharan*

Principal

Copy to

1. Principal
2. Office
- 3..Department of Commerce



*Jan*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## ABOUT THE INSTITUTION

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## ABOUT THE DEPARTMENT

RAAK Arts and Science College offers B. Com. Programmes. The Department of Commerce's mission is to create the conditions for economic growth and opportunity for all communities. Through its 13 bureaus, the Department works to drive U.S. economic competitiveness, strengthen domestic industry, and spur the growth of quality jobs in all communities across the country. The Department serves as the voice of business in the Federal Government, and at the same time, the Department touches and serves every American every day.



technologies such as quantum computing and artificial intelligence (AI).

## OBJECTIVE OF THE VALUE ADDED COURSE

- To improve employability skills of students.
- To bridge the skill gaps and make students industry ready.
- To provide an opportunity to students to develop inter-disciplinary skills

## ABOUT THE COURSE

The status of women in India is strongly connected to family relations. In India, the family is seen as crucially important, and in most of the country, the family unit is patrilineal. Families are usually multi-generational, with the bride moving to live with the in-laws..

- To familiarize students with the specific cultural contexts of women in India
- To Orient the students regarding Theories of Gender Relations, Position of Women in India Society
- To Imbibe knowledge about Economic Development, Women and Work Force Labour



RAAK ARTS AND SCIENCE COLLEGE  
Affiliated to Thiruvalluvar University, Vellore  
Recognized under section 2(f) of the UGC Act, 1956.

**Course:**  
**GOODS AND SERVICE TAX**

**Venue:**  
**CLASS ROOM**  
**Department of Commerce**  
**RAAK Arts & Science College**

**Start: 10/06/2020 TO 18/07/2020**

**Organized by**



**Department of Commerce**  
**RAAK Arts & Science College**  
**Perambai,**  
**Villianur**

**ALL ARE WELCOME**

*Jam*

**PRINCIPAL**  
**RAAK ARTS & SCIENCE COLLEGE**  
**VILLIANUR POST-605 110**  
**PERAMBAL.**



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
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## SYLLABUS

### GOODS AND SERVICE TAX

#### **Unit 1: Introduction to Goods and Services Tax (GST) (6 hr)**

Overview of indirect taxation before GST - Need for GST implementation - Objectives and features of GSTC comparison between GST and previous tax regimes - Historical context and global perspective of GST

#### **Unit 2: GST Structure and Administration (6 hr)**

GST Council and its role - Structure of GST (Central GST, State GST, Integrated GST) - GST registration process and threshold limits - Input Tax Credit (ITC) mechanism - GST compliance requirements and filing procedures.

#### **Unit 3: GST Legal Framework (6 hr)**

Constitutional provisions related to GST - Central Goods and Services Tax Act, 2017 - State Goods and Services Tax Acts - Integrated Goods and Services Tax Act, 2017 - Other related laws and regulations (e.g., GST Compensation Act).

#### **Unit 4: GST Taxation System (6 hr)**

Classification of goods and services under GST - Determination of place of supply for goods and services - Time of supply and valuation provisions - GST rates and exemptions - Anti-profiteering provisions and mechanism

#### **Unit 5: GST Compliance and Audit (6 hr)**

GST invoice requirements and invoice matching - E-way bill system and transportation of goods - GST audits and assessments - Appeals and dispute resolution mechanisms- Recent updates and amendments in GST laws



  
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RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
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# RAAK ARTS AND SCIENCE COLLEGE

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## VALUE ADDED COURSE (2020 -2021)

### GOODS AND SERVICE TAX


#### SUMMARY REPORT

The Goods and Services Tax (GST) course was designed to equip participants with a thorough understanding of India's indirect tax system, which underwent a significant overhaul with the introduction of GST. The course covered fundamental concepts such as GST registration, invoicing, filing of returns, and compliance requirements. Participants gained insights into the various GST laws, procedures, and their implications for businesses across different sectors. Practical aspects were emphasized through case studies and interactive sessions, enabling participants to apply theoretical knowledge to real-world scenarios. The course also highlighted the importance of GST in simplifying the tax structure, promoting transparency, and fostering a unified national market. Overall, it provided a comprehensive framework for navigating the complexities of GST and its impact on businesses and the economy.

  
COURSE COORDINATOR

  
HOD



  
PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

FROM

Mrs.V.ANBUKKARASI  
Head & Assistant Professor,  
Department of Commerce (CA)  
Raak Arts and Science College,  
Perambai – 605110

TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "BUSINESS JOURNALISM" for III B.COM (CA) students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: Business Journalism**

**Name of the Co-ordinator:**

Dr.D.BARANITHARAN (III B.COM (CA))

**Place:** Perambai

**Date:** 28.10.2020



Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

29.10.2020

## CIRCULAR

It is hereby informed that our Commerce (CA) is going to conduct the value added course on "BUSINESS JOURNALISM" for III B.COM (CA) students. Hence the students of Business Administration have to enroll their name to the course coordinator on or before 31.10.2020.

III B.COM (CA), - Business Journalism

*A. M. Harish Na. R.*

Principal

Copy to

1. Principal
2. Office
- 3...Department of Commerce (CA)



*Jm.*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





RAAK Arts and Science a Co-Education College affiliated to Thiruvalluvar University, Vellore, and Govt. of TN launched in the year 2009. We started with 5 UG courses and 180 students which have now grown up offering 12 UG courses, 7 PG Courses and 2 Ph.D., Courses with and overall strength of around 1500 students. We strive to produce graduates in different streams building strong moral values, well-disciplined with quality education to make them a complete human to face the challenges of the world with courage and commitment and help them lead a successful life building a good society.

#### ABOUT THE DEPARTMENT

RAAK Arts and Science College offers B. Com. (CA) Programmes and is manned by experienced and resourceful faculties, with a large number of publications including creative writings and translations. B.Com Computer Applications is a three-year full-time undergraduate program that deals with studying various aspects of computer science along with Commerce. It is a combination of Commerce and computer applications for commerce disciplines that require knowledge of computers. This course is designed to equip students with integrated knowledge of commerce and computer systems. In addition, this course offers ample job opportunities in the IT and Commerce industry. Upon completing

the course, students can work as Business Analyst, Business Consultant, Auditor, Computer Programmer, App Developer, etc.

#### OBJECTIVE OF THE VALUE ADDED COURSE

- To improve employability skills of students.
- To bridge the skill gaps and make students industry ready.
- To provide an opportunity to students to develop inter-disciplinary skills

#### ABOUT THE COURSE

Business journalism is the part of journalism that tracks, records, analyzes and interprets the business, economic and financial activities and changes that take place in societies. Topics widely cover the entire purview of all commercial activities related to the economy. To provide an overview of the use of accounting in business

- To help students understand the intricacies of business journalism.
- To train students in the techniques of business reporting.



RAAK

ARTS AND SCIENCE COLLEGE

(ISO: 9001: 2015 Certified Institution) (Recognized under 2(f) of UGC Act: 1956)  
(Affiliated to Thiruvalluvar University)

Course:  
**BUSINESS JOURNALISM**

Venue:  
**CLASS ROOM**  
Department of Commerce (CA)  
RAAK Arts & Science College

Start: **02.11.2020 to 08.12.2020**

Organized by



Department of Commerce (CA)  
RAAK Arts & Science College  
Perambai, Villianur

**ALL ARE WELCOME**

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAI.



# RAAK ARTS AND SCIENCE COLLEGE

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Recognized under section 2(f) of the UGC Act, 1956.

## SYLLABUS BUSINESS JOURNALISM

### Unit 1

(5 hrs)

#### Basics of business and economic reporting

Different types of stories: Analytical, news, in-depth, interviews and data (with examples);  
-Where and how to get stories (press conferences, meetings, analyst con-calls)-Building and maintaining sources-Connecting with the PR agencies and Corp Communications team-Why write mainly about public companies?

### Unit 2

(7 hrs)

#### Numbers are your best friend - studying companies' financial statements

Understand the basic components of financial statements - Balance sheet (Assets & liabilities), Profit & loss statement (Income & expenditure)-Cash flows, Notes to accounts;

### Unit 3

(6 hrs)

Covering specific sectors -- automobile, technology and telecommunication, finance and insurance, education, health, transportation and logistics, infrastructure and power.

### Unit 4

(7 hrs)

#### Data Journalism and Economics Reporting

Covering the broad economy; Stories economic reporters write about (topics related to companies and jobs, government spending, budget and tax policies).

### Unit 5

(6 hrs)


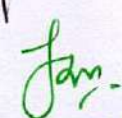
#### Preparing for press conferences and Style Book Guides

Covering strikes, corporate crisis, celebrity interviews, writing corporate profiles and covering product launches, product reviews-Recording Interviews;-What NOT to report;-Group writing assignment.

Reference:

- Bovee, C. L. (2009). *Business journalism: A guide to news and PR*. Pearson Prentice Hall.
- Blake, J. (Ed.). (2021). *The essential guide to business journalism*. Sage Publications.



  
HOD 

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RAAK ARTS & SCIENCE COLLEGE  
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PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## PERMISSION LETTER

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Head & Assistant Professor,  
Department of Commerce (CA)  
Raak Arts and Science College,  
Perambai – 605110

TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "ONLINE TRADING" for II B.COM (CA) students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: Online Trading**

**Name of the Co-ordinator:**

Mr.R.CHILAMBARASAN (II B.COM (CA)

**Place:** Perambai

**Date:** 28.10.2020

Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

29.10.2020

## CIRCULAR

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II B.COM (CA), - Online Trading

*A. M. Harindharan*

Principal

Copy to

1. Principal
2. Office
- 3...Department of Commerce (CA)

*Jar.*

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



### ABOUT THE INSTITUTION

RAAK Arts and Science a Co-Education College affiliated to Thiruvalluvar University, Vellore, and Govt. of TN launched in the year 2009. We started with 5 UG courses and 180 students which have now grown up offering 12 UG courses, 7 PG Courses and 2 Ph.D., Courses with and overall strength of around 1500 students. We strive to produce graduates in different streams building strong moral values, well-disciplined with quality education to make them a complete human to face the challenges of the world with courage and commitment and help them lead a successful life building a good society.

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the course, students can work as Business Analyst, Business Consultant, Auditor, Computer Programmer, App Developer, etc.

### OBJECTIVE OF THE VALUE ADDED COURSE

- To improve employability skills of students.
- To bridge the skill gaps and make students industry ready.
- To provide an opportunity to students to develop inter-disciplinary skills

### ABOUT THE COURSE

Online Trading is a method that facilitates buying and selling of financial instruments such as mutual funds, equities, bonds, Sovereign gold bonds, derivatives, stocks, ETFs and commodities through an electronic interface. Online Trading has simplified a complex process into a few clicks.

- To familiarize the students to the concept of Online Trading.
- To understand the latest developments in online trading



**RAAK**  
**ARTS AND SCIENCE COLLEGE**

(ISO 9001:2015 Certified Institution) (Recognized under 2(F) of UGC Act - 1956)  
(Affiliated to Thiruvalluvar University)

**Course:**  
**ONLINE TRADING**

**Venue:**  
**CLASS ROOM**  
**Department of Commerce (CA)**  
**RAAK Arts & Science College**

**Start: 02.11.2020 to 08.12.2020**

**Organized by**



**Department of Commerce (CA)**  
**RAAK Arts & Science College**  
**Perambai, Villianur**

**ALL ARE WELCOME**

**PRINCIPAL**  
**RAAK ARTS & SCIENCE COLLEGE**  
**VILLIANUR POST-605 110**  
**PERAMBAL.**





# RAAK ARTS AND SCIENCE COLLEGE

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## SYLLABUS ONLINE TRADING

<b>Unit 1</b>		<b>(5 hrs)</b>
	<b>Primary Market</b>	
	Initial Public Offer (IPO) – Introduction	
<b>Unit 2</b>		<b>(7 hrs)</b>
	<b>Secondary Market</b>	
	Role and Functions of Securities and Exchange Board of India (SEBI)- Stock Exchanges,-Stock Price Indices.	
<b>Unit 3</b>		<b>(6 hrs)</b>
	<b>Trading</b>	
	Logging on-Log Off/Exit from the Application-Invoking An Inquiry Screen-Market Watch-Previous Trades-Outstanding Orders-Activity Log-Order Status-Market Movement	
<b>Unit 4</b>		<b>(7 hrs)</b>
	<b>Methodology</b>	
	Fundamental Analysis-Technical Analysis	
<b>Unit 5</b>		<b>(6 hrs)</b>
	<b>Strategies</b>	
	Investment Strategies-Swing Trading Strategies- Day Trading Strategies	

COURSE COORDINATOR

HOD

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

FROM

Mrs.V.ANBUKKARASI  
Head & Assistant Professor,  
Department of Commerce (CA)  
Raak Arts and Science College,  
Perambai – 605110

TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "CYBER SECURITY" for I B.COM (CA) students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: Cyber Security**

**Name of the Co-ordinator:**

Ms.PRIYA (I B.COM (CA)

**Place:** Perambai

**Date:** 28.10.2020

Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

29.10.2020

## CIRCULAR

It is hereby informed that our Commerce (CA) is going to conduct the value added course on "CYBER SECURITY" for I B.COM (CA) students. Hence the students of Business Administration have to enroll their name to the course coordinator on or before 31.10.2020.

I B.COM (CA), - Cyber Security

*A. M. Harish Na R.*  
Principal

Copy to

1. Principal
2. Office
- 3...Department of Commerce (CA)



*Jan*  
**PRINCIPAL**  
**RAAK ARTS & SCIENCE COLLEGE**  
**VILLIANUR POST-605 110**  
**PERAMBAL.**



**ABOUT THE INSTITUTION**

RAAK Arts and Science a Co-Education College affiliated to Thiruvalluvar University, Vellore, and Govt. of TN launched in the year 2009. We started with 5 UG courses and 180 students which have now grown up offering 12 UG courses, 7 PG Courses and 2 Ph.D., Courses with and overall strength of around 1500 students. We strive to produce graduates in different streams building strong moral values, well-disciplined with quality education to make them a complete human to face the challenges of the world with courage and commitment and help them lead a successful life building a good society.

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offers ample job opportunities in the IT and Commin the course, students can work as Business Analyst, Busir Programmer, App Developer, etc.

**OBJECTIVE OF THE VALUE ADDED COURSE**

- To improve employability skills of students.
- To bridge the skill gaps and make students industry ready.
- To provide an opportunity to students to develop inter-disciplinary skills

**ABOUT THE COURSE**

Cyber security is the practice of protecting systems, networks, and programs from digital attacks. These cyber-attacks are usually aimed at accessing, changing, or destroying sensitive information; extorting money from users via ransom ware; or interrupting normal business processes. To help students understand the intricacies of business journalism.

- To exhibit knowledge to secure corrupted systems, protect personal data, and secure computer networks in an organization



**RAAK**  
**ARTS AND SCIENCE COLLEGE**

166 8001 2015 Certified Institution 3 (Recognized under 2019 of UGC Act - 1956)  
 (Affiliated to Thiruvalluvar University)

**Course:**  
**CYBER SECURITY**

**Venue:**  
**CLASS ROOM**  
**Department of Commerce (CA)**  
**RAAK Arts & Science College**

**Start: 02.11.2020 to 08.12.2020**

**Organized by**



**Department of Commerce (CA)**  
**RAAK Arts & Science College**  
**Perambal, Villianur**

**ALL ARE WELCOME**





# RAAK ARTS AND SCIENCE COLLEGE

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Recognized under section 2(f) of the UGC Act, 1956.

## SYLLABUS CYBER SECURITY

### Unit 1

(5 hrs)

Definition – Crime, Cyber Crime, Information Security, Digital Forensics – Conventional Crime Vs. Cyber Crime - Uniqueness of Cyber Crime – History of Cyber Crimes.

### Unit 2

(7 hrs)

Forms of Cyber Crimes – Hacking – types of hacking, hackers, Cracking, Dos, DDos, Cyber Bullying, Cyber Stalking, Pornography, Phishing, Intellectual Property Theft, Data Theft, Dada diddling, malwares, stegnography, salami attacks, ATM and Credit card frauds, Telecom Frauds

### Unit 3

(6 hrs)

Social Media – Definition, Types, advantages and disadvantages – Crimes through social media, victimization through social media – Do's and Don'ts in Social Media – Safe Surfing

### Unit 4

(7 hrs)

Understanding cyber criminal behavior – modus operandi - Criminological , Sociological and Psychological theories relating to cyber crime behavior.

### Unit 5

(6 hrs)

Information Security - Fraud Triangle – Components of Information Security – Desktop Security – Email Security – Web Security – Threats to information security and counter measures

### References

- Gupta, A., & Rao, M. (2022). Cybersecurity for everyone: Protecting yourself online. Tata McGraw-Hill Education.
- Singh, R. (2023). Securing the digital frontier: A guide to cybersecurity. Wiley India.

COURSE COORDINATOR

HOD

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

FROM

Mrs.SANGEETHA A

Head & Assistant Professor,

Department of Commerce (CS),

Raak Arts and Science College,

Perambai – 605110

TO

The Principal,

Raak Arts and Science College,

Perambai – 605110

Respected Sir,

SUB: Requesting permission for conducting Value Added Course for students - Reg

This is bringing to your notice that we have planned to conduct a Value Added Course on "Mutual Fund Operation" for I & III B.Com (CS) students. This course is very useful for students to develop their knowledge about their future study and during the pandemic period. So please give permission for the above said program.

Thanking you

Course Name: Mutual Fund Operation

Name of the Coordinator:

Ms.G.Shenbagadevi

Assistant Professor (B.Com (CS))

Place: Perambai

Date: 21.12.2020

Yours Faithfully

**PRINCIPAL**  
**RAAK ARTS & SCIENCE COLLEGE**  
**VILLIANUR POST-605 110**  
**PERAMBAL.**





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

23.12.2020

## CIRCULAR

It is hereby informed that our B.Com (CS) is going to conduct the value added course on "Mutual Fund Operation" for I & III B.com (CS) students. Hence the students of B.Com (CS) have to enroll their name to the course coordinator on or before 30.12.2020.

I & III B.Com (CS), - Mutual Fund Operation

*D. M. Harish Na 2.*  
Principal

Copy to

1. Principal
2. Office
- 3..Department of Commerce (CS)



*Jan.*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## About the College

RAAK Arts and Science College was established in the year 2009; it was affiliated to Thiruvalluvar University, Vellore, Tamil Nadu, India. It started with five Under Graduate degree Programs and 180 students. Today, the college is offering more than eleven Under Graduate degree Programs, three Post Graduate Degree Programs and two Ph.D. Degree Programs. The college has been fostering graduates in Arts, Sciences, Commerce, Business Administration, Social Work, Information Technology and Computer Science. This has resulted in interdisciplinary environment that promotes cross disciplinary learning and research environment to the students. RASC is located in a green campus that has all the necessary infrastructure including laboratories, ICT classrooms, transport facilities etc.

## About the Department

The Department of corporate secretary ship was established in 2017. The B.com CS course is offered so as to reflect progress in fields of business marketing, income tax, company law and entrepreneurial development and other technological trends as an increasing demand of the job markets. The department is working to enrich and strengthen the young talents by producing competent students to excel in corporate and entrepreneurial skills. Our students are provided opportunity to do online, short term and value added courses. The course will make the students competent taking up wide range of responsible position in the secretarial, Legal, finance, accounts, Personnel, administrative & security market analyst

## AGENDA

### Day 1 to 10

#### Introduction to Mutual Funds

Overview of Mutual Funds - Types of Mutual Funds in India - Regulatory Framework for Mutual Funds in India - Role of Asset Management Companies (AMCs) and Custodians

#### Mutual Fund Investment Process

Fund Selection and Research - Investment Strategies: Active vs. Passive Management - Portfolio Construction and Asset Allocation - Performance Evaluation and Benchmarking

### Day 11 to 20

#### Regulatory and Legal Framework

Securities and Exchange Board of India (SEBI) Regulations - Compliance and Reporting Requirements - Investor Protection Measures - Ethical Considerations in Mutual Fund Operations

#### Operational Aspects of Mutual Funds

Fund Accounting and Valuation - Distribution Channels: Direct vs. Indirect - Investor Services and Customer Support - Technology and Automation in Mutual Fund Operations

### Day 21 to 30

#### Future Trends and Developments

Emerging Trends in Mutual Funds Industry - Impact of Technology on Mutual Fund Operations - Global Perspectives on Mutual Funds - Challenges and Opportunities for Mutual Fund Industry in India

Assessment Test will be conducted for 30 minutes with multiple choice question. No negative marks.



RAAK ARTS AND SCIENCE COLLEGE  
Recognized under 2(f) of UGC Act - 1956  
(Affiliated to Thiruvalluvar University | ISO  
9001: 2015 Certified Institution)  
Perambai - 605110, Villupuram dt, Tamilnadu  
(A Unit of Farouk Educational Trust)

DEPARTMENT OF  
COMMERCE (CS)

## VALUE ADDED COURSE

## MUTUAL FUND

## OPERATION

FROM 04/01/2021  
TO 22/02/2021

ALL ARE WELCOME



*Jm.*  
PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## SYLLABUS

### MUTUAL FUND OPERATION

Unit 1: Introduction to Mutual Funds (6 hours)

Overview of Mutual Funds - Types of Mutual Funds in India - Regulatory Framework for Mutual Funds in India - Role of Asset Management Companies (AMCs) and Custodians

Unit 2: Mutual Fund Investment Process (6 hours)

Fund Selection and Research - Investment Strategies: Active vs. Passive Management - Portfolio Construction and Asset Allocation - Performance Evaluation and Benchmarking

Unit 3: Regulatory and Legal Framework (6 hours)

Securities and Exchange Board of India (SEBI) Regulations - Compliance and Reporting Requirements - Investor Protection Measures - Ethical Considerations in Mutual Fund Operations

Unit 4: Operational Aspects of Mutual Funds (6 hours)

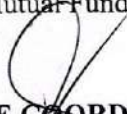
Fund Accounting and Valuation - Distribution Channels: Direct vs. Indirect - Investor Services and Customer Support - Technology and Automation in Mutual Fund Operations

Unit 5: Future Trends and Developments (6 hours)

Emerging Trends in Mutual Funds Industry - Impact of Technology on Mutual Fund Operations - Global Perspectives on Mutual Funds - Challenges and Opportunities for Mutual Fund Industry in India

#### Reference Books

1. Indian Mutual Funds Handbook: A Guide for Industry Professionals and Intelligent Investors by Sundar Sankaran
2. Mutual Funds: The Money Multiplier by Sanjay Matai
3. Mutual Funds: A Comprehensive Guide to Investment in Mutual Funds by Jitendra Gala
4. "Investing in Equity Mutual Funds: Your Step-by-Step Guide to Investing in Equity Mutual Funds" by Ankit Gala and Jitendra Gala

  
COURSE COORDINATOR

  
HOD



  
PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## PERMISSION LETTER

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Head & Assistant Professor,  
Department of Commerce (CS),  
Raak Arts and Science College,  
Perambai – 605110

TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

SUB: Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your notice that we have planned to conduct a Value Added Course on "Bio-Entrepreneurship" for II B.Com (CS) students. This course is very useful for students to develop their knowledge about their future study and during pandemic situations. So please give permission for the above said program.

Thanking you

Course Name: Bio - Entrepreneurship

Name of the Coordinator:

Ms.G.Shenbagadevi

Assistant Professor (B.Com (CS))

Place: Perambai

Date: 21.12.2020

Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





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23.12.2020

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I & III B.Com (CS), - Bio - Entrepreneurship

*A. M. Harish Na. 2.*  
Principal

Copy to

1. Principal
2. Office
- 3..Department of Commerce (CS)



*Jan.*  
PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
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## AGENDA

### Day 1 to 10

#### Introduction to Bio-Entrepreneurship

Overview and Scope - Ecosystem and Key Players - Case Studies: Successes and Failures - Trends and Future Directions

#### Building a Bio-Based Business

Opportunity Identification and Market Research - Business Models in Biotech - Intellectual Property and Legal Considerations - Funding Sources and Financial Planning

### Day 11 to 20

#### Product Development and Management

R&D and Collaboration - Product Development Lifecycle - Regulatory Affairs - Quality Assurance and Control

Marketing and Sales in Biotechnology  
Market Analysis and Segmentation - Branding and Positioning - Sales Strategies and Partnerships -

### Day 21 to 30

#### Managing and Scaling Bio-Based Ventures

Leadership and Team Building - Operational Management - Risk Management - Scaling and Exit Strategies

Assessment Test will be conducted for 30 minutes with multiple choice questions. No negative marks.



RAAK ARTS AND SCIENCE COLLEGE  
Recognized under 2(f) of UGC Act - 1956  
(Affiliated to Thiruvalluvar University | ISO  
9001: 2015 Certified Institution)  
Perambai - 605110, Villupuram dt, Tamilnadu  
(A Unit of Farouk Educational Trust)

DEPARTMENT OF  
COMMERCE (CS)

## BIO - ENTREPRENEURSHIP

FROM 04/01/2021  
TO 22/02/2021

ALL ARE WELCOME



  
PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
WILLIANUR POST-605 110  
PERAMBAL



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## SYLLABUS

### BIO - ENTREPRENEURSHIP

Unit 1: Introduction to Bio-Entrepreneurship (6 hours)

Overview and Scope - Ecosystem and Key Players - Case Studies: Successes and Failures - Trends and Future Directions

Unit 2: Building a Bio-Based Business (6 hours)

Opportunity Identification and Market Research - Business Models in Biotech - Intellectual Property and Legal Considerations - Funding Sources and Financial Planning

Unit 3: Product Development and Management (6 hours)

R&D and Collaboration - Product Development Lifecycle - Regulatory Affairs - Quality Assurance and Control

Unit 4: Marketing and Sales in Biotechnology (6 hours)

Market Analysis and Segmentation - Branding and Positioning - Sales Strategies and Partnerships - Digital Marketing

Unit 5: Managing and Scaling Bio-Based Ventures (6 hours)

Leadership and Team Building - Operational Management - Risk Management - Scaling and Exit Strategies

#### Reference Books

1. Biotechnology Entrepreneurship: Starting, Managing, and Leading Biotech Companies by Craig D. Shimasaki
2. The Business of Bioscience: What goes into making a Biotechnology Product by Craig D. Shimasaki

COURSE COORDINATOR

HOD



PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

### FROM

Mrs. E.RAJALAKSHMI  
Head & Assistant Professor,  
Department of Computer Application.  
Raak Arts and Science College,  
Perambai – 605110

### TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on “HANDS ON TRAINING AN ANDROID APP DEVELOPMENT “for I & III BCA students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name:** “HANDS ON TRAINING AN ANDROID APP DEVELOPMENT


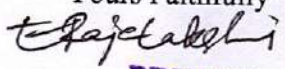
**Name of the Co-ordinator:**

Mrs. E.RAJALAKSHMI

**Place:** Perambai

**Date:** 25/1/2021



  
Yours Faithfully  
  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

25/01/2021

## CIRCULAR

It is hereby informed that our Computer Application department is going to conduct the value added course on "HANDS ON TRAINING AN ANDROID APP DEVELOPMENT" for I & III BCA students. Hence the students of Computer science have to enroll their name to the course coordinator on or before 31/1/21

I & III BCA- "HANDS ON TRAINING AN ANDROID APP DEVELOPMENT"

*A. H. N. No. 2.*  
Principal

Copy to

1. Principal
2. Office
3. BCA



*Jar.*  
PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## About the College

RAAK Arts and Science College was established in the year 2009; it was affiliated to Thiruvalluvar University, Vellore, Tamil Nadu, India. It started with five Under Graduate degree Programs and 180 students. Today, the college is offering more than eleven Under Graduate degree Programs, three Post Graduate Degree Programs and two Ph.D. Degree Programs. The college has been fostering graduates in Arts, Sciences, Commerce, Business Administration, Social Work, Information Technology and Computer Science. This has resulted in interdisciplinary environment that promotes cross disciplinary learning and research environment to the students. RASC is located in a green campus that has all the necessary infrastructure including laboratories, ICT classrooms, transport facilities etc.

## About the Department

Computer science is a dynamic and rapidly growing area that has become an integral part of the world today. It is an interdisciplinary application and utility of computer programming that has transformed every aspect of human life including biology, businesses, cyber security, economics, engineering, information assurance, languages and linguistics, mathematics, physics, public policy, etc. Today, programming and digitalization are used to address a wider range of complex issues. Technology has made the world better, faster, and more connected. But this didn't happen by magic. It has been achieved to the brilliant minds of IT graduates, who took their passion for technology and used it to create gadgets and computer programs that help the society every single day.

## AGENDA

### Day 1 to 10

Overview of Android and its ecosystem  
History and versions of Android -  
Understanding the Android market and its opportunities - Setting up the development environment- Installing Android Studio-Configuring the Android SDK-Introduction to Android Studio IDE  
Understanding the basics  
Android project structure-Introduction to Gradle build system

### Day 11 to 20

#### Android Fundamentals

Activities and Lifecycle  
Creating and managing activities  
Activity lifecycle methods  
User Interface Design  
Understanding layouts: Linear Layout, Relative Layout, Constraint Layout  
Working with views: Text View, Edit Text, Button, Image View Using Recycler View and List View for displaying lists

### Day 21 to 30

#### Animations and Transitions

- Property animations
- View animations
- Transition framework



RAAK ARTS AND SCIENCE COLLEGE

DEPARTMENT OF COMPUTER APPLICATION

## VALUE ADDED COURSE

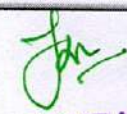
HANDS ON TRAINING AN ANDROID APP DEVELOPMENT

FROM 01/02/2021

TO 31/03/2021

ALL ARE WELCOME



  
PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## SYLLABUS

### Course Title: HANDS ON TRAINING AN ANDROID APP DEVELOPMENT

#### UNIT 1: Introduction to Android Development

Overview of Android and its ecosystem

- History and versions of Android
- Understanding the Android market and its opportunities

Setting up the development environment

- Installing Android Studio
- Configuring the Android SDK
- Introduction to Android Studio IDE

Understanding the basics

- Android project structure
- Introduction to Gradle build system

#### UNIT 3: Android Fundamentals

Activities and Lifecycle

- Creating and managing activities
- Activity lifecycle methods

#### UNIT 4: User Interface Design

- Understanding layouts: LinearLayout, RelativeLayout, ConstraintLayout
- Working with views: TextView, EditText, Button, ImageView
- Using RecyclerView and ListView for displaying lists

#### UNIT 5: Animations and Transitions

- Property animations
- View animations
- Transition framework



  
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# RAAK ARTS AND SCIENCE COLLEGE

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## DEPARTMENT OF COMPUTER APPLICATION


### VALUE ADDED COURSE(2020 -2021)

### HANDS ON TRAINING AN ANDROID APP DEVELOPMENT

### SUMMARY REPORT

Technology has become a part our daily life along with growing civilization. In which our education system brings technological changes very fast. These developments in the field of Computer Science And Technology will be very useful for Students. In particular, we can easily find various information's easily by learning this course. Through which we can enrich our ideas and thoughts in depth.

  
CO-ORDINATOR

  
HOD



  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

### FROM

Mrs. E.RAJALAKSHMI  
Head & Assistant Professor,  
Department of computer science & Applications  
Raak Arts and Science College,  
Perambai – 605110

### TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "PRACTICAL COURSE ON DATA SCIENCE" for II BCA students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name:** Practical course on Data Science

**Name of the Co-ordinator:**

Mrs. R.SAKTHIDEVI

**Place:** Perambai

**Date:** 21/10/2020



Yours Faithfully

*E. Rajalakshmi*  
*Jam*

**PRINCIPAL**  
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PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

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21/10/2020

## CIRCULAR

It is hereby informed that our Computer Application department is going to conduct the value added course on “**PRACTICAL COURSE ON DATA SCIENCE**” for II BCA students. Hence the students of Computer science have to enroll their name to the course coordinator on or before 28/10/2020

II BCA- “**PRACTICAL COURSE ON DATA SCIENCE**”

*A. M. Harish Na 2.*

Principal

Copy to

1. Principal
2. Office
3. BCA



*Jm.*  
PRINCIPAL  
ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## About the College

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## About the Department

Computer science is a dynamic and rapidly growing area that has become an integral part of the world today. It is an interdisciplinary application and utility of computer programming that has transformed every aspect of human life including biology, businesses, cyber security, economics, engineering, information assurance, languages and linguistics, mathematics, physics, public policy, etc. Today, programming and digitalization are used to address a wider range of complex issues. Technology has made the world better, faster, and more connected. But this didn't happen by magic. It has been achieved to the brilliant minds of IT graduates, who took their passion for technology and used it to create gadgets and computer programs that help the society every single day.

## AGENDA

### Day 1 to 10

#### INTRODUCTION TO DATA SCIENCE

Overview of Data Science-Data Science vs. Data Analytics vs. Machine Learning-The Data Science Process-Tools and Technologies in Data Science

Introduction to Pandas-Data Frames and Series-Importing and Exporting Data-Data Cleaning and Preparation-Handling Missing Data

### Day 11 to 20

Importance of Data

Visualization-Matplotlib Basics-Seaborn for Statistical Plots-Advanced Visualization with Plotly Importance of EDA-Descriptive Statistics-Data Distributions-Correlation and Covariance

### Day 21 to 30

Probability Theory-Hypothesis Testing-ANOVA and Chi-Square Tests-Regression Analysis



RAAK ARTS AND SCIENCE COLLEGE

DEPARTMENT OF COMPUTER APPLICATION

**VALUE ADDED COURSE**

**PRACTICAL COURSE ON DATA SCIENCE**

FROM 02/11/2020  
TO 11/12/2020

**ALL ARE WELCOME**



*Jar.*

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PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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Recognized under section 2(f) of the UGC Act, 1956

## SYLLABUS

### Course Title: PRACTICAL COURSE ON DATA SCIENCE

#### UNIT 1: INTRODUCTION TO DATA SCIENCE

Overview of Data Science-Data Science vs. Data Analytics vs. Machine Learning-The Data Science Process-Tools and Technologies in Data Science

#### UNIT 2: DATA MANIPULATION WITH PANDAS

Introduction to Pandas-DataFrames and Series-Importing and Exporting Data-Data Cleaning and Preparation-Handling Missing Data

#### UNIT 3: DATA VISUALIZATION

Importance of Data Visualization-Matplotlib Basics-Seaborn for Statistical Plots-Advanced Visualization with Plotly

#### UNIT 4: EXPLORATORY DATA ANALYSIS (EDA)

Importance of EDA-Descriptive Statistics-Data Distributions-Correlation and Covariance

#### UNIT 5 : STATISTICAL ANALYSIS

Probability Theory-Hypothesis Testing-ANOVA and Chi-Square Tests-Regression Analysis



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PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## DEPARTMENT OF COMPUTER APPLICATION

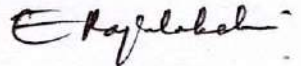
### VALUE ADDED COURSE(2020 -2021)

### PRACTICAL COURSE ON DATA SCIENCE

### SUMMARY REPORT

Technology has become a part our daily life along with growing civilization. In which our education system brings technological changes very fast. These developments in the field of Computer Science And Technology will be very useful for Students. In particular, we can easily find various information's easily by learning this course. Through which we can enrich our ideas and thoughts in depth.

  
CQ-ORDINATOR

  
HOD



  
PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

### FROM

Mrs. D.RAJALAKSHMI,  
Head & Assistant Professor,  
Department of computer science ,  
Raak Arts and Science College,  
Perambai – 605110

### TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on “WIFI TECNOLOGY “for III B.SC CS students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: “WIFI TECNOLOGY”**

**Name of the Co-ordinator:**

Mrs. D.RAJALAKSHMI

**Place:** Perambai

**Date:** 25/10/2020

Yours Faithfully,

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

25/10/2020

## CIRCULAR

It is hereby informed that our Computer Science department is going to conduct the value added course on “WIFI TECNOLOGY” for III B.SC CS students. Hence the students of Computer science have to enroll their name to the course coordinator on or before 31.10.2020.

II B.SC CS -“WIFI TECNOLOGY”

*D. M. Harindha No 2.*

Principal

Copy to

1. Principal
2. Office
3. B.SC CS



*Jan.*  
— PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## About the College

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## About the Department

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## AGENDA

### Day 1 to 10

#### Day 1 to 10

#### Introduction to Wireless Networking

Overview of wireless communication - Evolution of wireless technologies - Basics of radio frequency (RF) communication - Introduction to WiFi technology - IEEE 802.11 family of standards - Differences between 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac, 802.11ax - WiFi Alliance certifications (e.g., Wi-Fi CERTIFIED 6™) - WiFi operating modes (Infrastructure mode, Ad-hoc mode) - MAC layer operation in WiFi

#### Day 11 to 20

**WiFi Architecture** Components of a WiFi network (Access Points, Clients, Routers, Switches) - WiFi deployment scenarios (Home, Enterprise, Public Hotspots) - Wireless distribution system (WDS) - Basic network planning and design considerations

#### WiFi Security

Threats to wireless networks - WEP, WPA, and WPA2 encryption - WPA3 security enhancements - WiFi Protected Setup (WPS) - Best practices for securing WiFi networks

#### Day 21 to 30

**WiFi Performance Optimization** Factors affecting WiFi performance (Interference, Signal Strength, Bandwidth) - Site survey techniques - Channel planning and optimization - Quality of Service (QoS) in WiFi networks



RAAK ARTS AND SCIENCE COLLEGE

DEPARTMENT OF COMPUTER  
SCIENCE

## VALUE ADDED COURSE

### WIFI TECHNOLOGY

FROM 2/11/2020

TO 31/12/2020

ALL ARE WELCOME



*Jam.*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## SYLLABUS

### Course Title: WIFI TECNOLOGY Syllabus

#### Course Overview

The **WIFI TECNOLOGY** is designed to provide hands-on experience with various software tools and applications commonly used in the industry. Students will learn practical skills related to software development, testing, and deployment.

#### Course Duration

**Duration:** 30 hrs

#### Unit 1: Introduction to Wireless Networking

**Hrs: 6**

Overview of wireless communication - Evolution of wireless technologies - Basics of radio frequency (RF) communication - Introduction to WiFi technology

#### Unit 2: WiFi Standards and Protocols

**Hrs: 6**

IEEE 802.11 family of standards - Differences between 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac, 802.11ax - WiFi Alliance certifications (e.g., Wi-Fi CERTIFIED 6™) - WiFi operating modes (Infrastructure mode, Ad-hoc mode) - MAC layer operation in WiFi

#### Unit 3: WiFi Architecture

**Hrs: 6**

Components of a WiFi network (Access Points, Clients, Routers, Switches) - WiFi deployment scenarios (Home, Enterprise, Public Hotspots) - Wireless distribution system (WDS) - Basic network planning and design considerations

#### Unit 4: WiFi Security

**Hrs: 6**

Threats to wireless networks - WEP, WPA, and WPA2 encryption - WPA3 security enhancements - WiFi Protected Setup (WPS) - Best practices for securing WiFi networks

#### Unit 5: WiFi Performance Optimization

**Hrs: 6**

Factors affecting WiFi performance (Interference, Signal Strength, Bandwidth) - Site survey techniques - Channel planning and optimization - Quality of Service (QoS) in WiFi networks

#### Recommended Resources

- Textbooks: Refer to standard textbooks on software engineering, programming languages, and database management.
- Online tutorials: Explore platforms like Coursera, edX, and YouTube for additional learning materials.



  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

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## DEPARTMENT OF COMPUTER SCIENCE

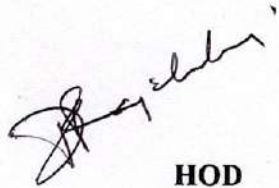
### VALUE ADDED COURSE(2020 -2021)

#### WIFI TECNOLOGY

#### SUMMARY REPORT

Technology has become a part our daily life along with growing civilization. In which our education system brings technological changes very fast. These developments in the field of Computer Science And Technology will be very useful for Students. In particular, we can easily find various information's easily by learning this course. Through which we can enrich our ideas and thoughts in depth.

  
CO-ORDINATOR

  
HOD



  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

### FROM

Mrs. D.RAJALAKEHMI  
Head & Assistant Professor,  
Department of computer science  
Raak Arts and Science College,  
Perambai – 605110

### TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "POWER BI" for II B.SC CS students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: "POWER BI"**

**Name of the Co-ordinator:**

Mrs. D.RAJALAKSHMI

**Place:** Perambai

**Date:** 24.01.2021



Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

25.01.2021

## CIRCULAR

It is hereby informed that our Computer Science department is going to conduct the value added course on “**POWER BI**” for II B.SC CS students. Hence the students of Computer science have to enroll their name to the course coordinator on or before 31.01.2021.

II B.SC CS -“ **POWER BI**”

*A. M. Harish Na 2.*  
Principal

Copy to

1. Principal
2. Office
3. B.SC CS



*Jan*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## About the College

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## AGENDA

### Day 1 to 10

#### Day 1 to 10

#### Introduction to Power BI

Overview of Business Intelligence (BI) and its importance- Introduction to Power BI and its features - Understanding Power BI Desktop, Power BI Service, and Power BI Mobile - Installation and setup of Power BI Desktop - Introduction to Power BI components: Power Query, Power Pivot, Power View, and Power Map

#### Day 11 to 20

#### Data Modeling and Relationships

Introduction to data modeling concepts - Creating relationships between tables - Understanding primary keys and foreign keys - Introduction to DAX (Data Analysis Expressions) - Creating calculated columns and measures using DAX - Introduction to calculated tables and row-level security

#### Day 21 to 30

#### Advanced Analytics with Power BI

Introduction to advanced analytics features in Power BI - Using AI visuals and Insights in Power BI Time intelligence functions in DAX - Introduction to forecasting and trend analysis - Incorporating R and Python scripts in Power BI Implementing advanced analytics scenarios (predictive modeling, clustering, etc.)



RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore  
Recognized under section 2(f) of the UGC Act, 1956

DEPARTMENT OF COMPUTER  
SCIENCE

**VALUE ADDED COURSE**

**POWER BI**

**FROM 01/02/2021**

**TO 31/03/2021**

**ALL ARE WELCOME**



**PRINCIPAL**  
**RAAK ARTS & SCIENCE COLLEGE**  
**MILLIANUR POST-605 110**  
**PERAMBAL.**



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## SYLLABUS

### Course Title: POWER BI Syllabus

#### Course Overview

The **POWER BI** is designed to provide hands-on experience with various software tools and applications commonly used in the industry. Students will learn practical skills related to software development, testing, and deployment.

#### Course Duration

**Duration:** 30 hrs

#### UNIT 1: Introduction to Power BI

**HRS: 6**

Overview of Business Intelligence (BI) and its importance- Introduction to Power BI and its features - Understanding Power BI Desktop, Power BI Service, and Power BI Mobile - Installation and setup of Power BI Desktop - Introduction to Power BI components: Power Query, Power Pivot, Power View, and Power Map

#### UNIT 2: Data Acquisition and Transformation

**HRS: 6**

Data sources supported by Power BI - Connecting to different data sources (Excel, CSV, databases, web, etc.) - Data loading and transformation using Power Query Editor- Understanding data types and data shaping techniques -Merging and appending data from different sources- Data cleansing, filtering, and shaping operations

#### UNIT 3: Data Modeling and Relationship

**HRS: 6**

Introduction to data modeling concepts - Creating relationships between tables - Understanding primary keys and foreign keys - Introduction to DAX (Data Analysis Expressions) - Creating calculated columns and measures using DAX - Introduction to calculated tables and row-level security

#### UNIT 4: Data Visualization

**HRS: 6**

Principles of effective data visualization - Creating basic visualizations (bar charts, line charts, pie charts, etc.) - Enhancing visualizations with formatting options - Working with slicers, filters, and hierarchies - Advanced visualization techniques (treemaps, scatter plots, maps, etc.) - Creating interactive reports and dashboards



  
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PERAMBAL



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## UNIT 5: Advanced Analytics with Power BI

HRS: 6

Introduction to advanced analytics features in Power BI - Using AI visuals and Insights in Power BI Time intelligence functions in DAX - Introduction to forecasting and trend analysis - Incorporating R and Python scripts in Power BI Implementing advanced analytics scenarios (predictive modeling, clustering, etc.)

### Recommended Resources

- Textbooks: Refer to standard textbooks on software engineering, programming languages, and database management.
- Online tutorials: Explore platforms like Coursera, edX, and YouTube for additional learning materials.



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## DEPARTMENT OF COMPUTER SCIENCE

### VALUE ADDED COURSE(2020 -2021)

#### POWER BI

#### SUMMARY REPORT

Technology has become a part our daily life along with growing civilization. In which our education system brings technological changes very fast. These developments in the field of Computer Science And Technology will be very useful for Students. In particular, we can easily find various information's easily by learning this course. Through which we can enrich our ideas and thoughts in depth.

CO-ORDINATOR

HOD



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PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

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## PERMISSION LETTER

### FROM

Mr. MOHANRAJ  
Head & Assistant Professor,  
Department of computer science & Applications  
Raak Arts and Science College,  
Perambai – 605110

### TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "INTERNET OF THINGS" for I B.SC CS students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name:** "INTERNET OF THINGS"

**Name of the Co-ordinator:**

**Place:** Perambai

**Date:** 25.08.2020



Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

25.08.2020

## CIRCULAR

It is hereby informed that our Computer science department is going to conduct the value added course on "INTERNET OF THINGS" for I BSC CS students. Hence the students of Computer science have to enroll their name to the course coordinator on or before 29 .08.2020

I BSC CS- "INTERNET OF THINGS"

*A. M. Harand No 2.*  
Principal

Copy to

1. Principal
2. Office
3. BSC CS



*Jar.*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## About the College

RAAK Arts and Science College was established in the year 2009; it was affiliated to Thiruvalluvar University, Vellore, Tamil Nadu, India. It started with five Under Graduate degree Programs and 180 students. Today, the college is offering more than eleven Under Graduate degree Programs, three Post Graduate Degree Programs and two Ph.D. Degree Programs. The college has been fostering graduates in Arts, Sciences, Commerce, Business Administration, Social Work, Information Technology and Computer Science. This has resulted in interdisciplinary environment that promotes cross disciplinary learning and research environment to the students. RASC is located in a green campus that has all the necessary infrastructure including laboratories, ICT classrooms, transport facilities etc.

## About the Department

Computer science is a dynamic and rapidly growing area that has become an integral part of the world today. It is an interdisciplinary application and utility of computer programming that has transformed every aspect of human life including biology, businesses, cyber security, economics, engineering, information assurance, languages and linguistics, mathematics, physics, public policy, etc. Today, programming and digitalization are used to address a wider range of complex issues. Technology has made the world better, faster, and more connected. But this didn't happen by magic. It has been achieved to the brilliant minds of IT graduates, who took their passion for technology and used it to create gadgets and computer programs that help the society

## AGENDA

### Day 1 to 10

Definition and evolution of IoT. Key characteristics and components of IoT systems - Overview of IoT architecture

Types of sensors and actuators - Sensor data acquisition and processing - Actuator control mechanisms

### Day 11 to 20

Wired and wireless communication protocols - IoT networking technologies (Wi-Fi, Bluetooth, Zigbee, etc.) - IoT data communication standards (MQTT, CoAP, HTTP, etc.) - Security challenges in IoT system - Authentication and authorization mechanisms - Privacy concerns and data protection in IoT

### Day 21 to 30

Cloud computing for IoT - Edge computing and fog computing - IoT platform selection criteria

Smart homes and home automation - Industrial IoT (IIoT) applications - Healthcare IoT solutions



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(Affiliated to Thiruvalluvar University ISO 9001:2015 Certified Institution)  
Perambai - 605110, Villupuram dt. Tamilnadu  
(A Unit of Farook Educational Trust)

**DEPARTMENT OF COMPUTER  
SCIENCE**

## VALUE ADDED COURSE

**INTERNET OF THINGS**

**FROM 4/09/2021**

**TO 31/10/2021**

**ALL ARE WELCOME**



*Jam*  
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**VILLIANUR POST-605 110**  
**PERAMBAI.**



# RAAK ARTS AND SCIENCE COLLEGE

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## SYLLABUS

### Course Title: INTERNET OF THINGS

#### Course Overview

The **Internet of Things** is designed to provide hands-on experience with various software tools and applications commonly used in the industry. Students will learn practical skill related to software development, testing, and deployment.

**Course Duration**

**Duration:** 30 hrs

#### UNIT 1: Introduction to IoT

**HRS: 6**

Definition and evolution of IoT- Key characteristics and components of IoT systems -Overview of IoT architecture

#### UNIT 2: Sensors and Actuators

**HRS: 6**

Types of sensors and actuators - Sensor data acquisition and processing- Actuator control mechanisms

#### UNIT 3: Communication Protocols IoT Security and Privacy

**HRS: 6**

Wired and wireless communication protocols - IoT networking technologies (Wi-Fi, Bluetooth, Zigbee, etc.) - IoT data communication standards (MQTT, CoAP, HTTP, etc.) - Security challenges in IoT system - Authentication and authorization mechanisms - Privacy concerns and data protection in IoT

#### UNIT 4: IoT Platforms and Infrastructure

**HRS: 6**

Cloud computing for IoT - Edge computing and fog computing - IoT platform selection criteria

#### UNIT 5: IoT Applications

**HRS: 6**

Smart homes and home automation - Industrial IoT (IIoT) applications - Healthcare IoT solutions - Smart cities and environmental monitoring.

#### Recommended Resources

- Textbooks: Refer to standard textbooks on software engineering, programming languages, and database management.
- Online tutorials: Explore platforms like Coursera, edX, and YouTube for additional learning materials.



  
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# RAAK ARTS AND SCIENCE COLLEGE

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## DEPARTMENT OF COMPUTER SCIENCE

### VALUE ADDED COURSE(2020 - 2021)

#### INTERNET OF THINGS

#### SUMMARY REPORT

Technology has become a part of our daily life along with growing civilization. In which our education system brings technological changes very fast. These developments in the field of Computer Science And Technology will be very useful for Students. In particular, we can easily find various information's easily by learning this course. Through which we can enrich our ideas and thoughts in depth.

CO-ORDINATOR

HOD



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# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

### FROM

Mr. A. Saravanan,  
Head & Assistant Professor,  
Department of Mathematics,  
Raak Arts and Science College,  
Perambai – 605110

### TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on “**Mathematical Economics**” for I B.Sc., II B.Sc., and III B.Sc., Mathematics students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name:** “Mathematical Economics”

**Name of the Co-ordinator:**

Mr. K. PARTHIBAN

**Place:** Perambai

**Date :** 27.08.2020

Yours Faithfully



*Jan.*  
**PRINCIPAL**  
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**PERAMBAL.**



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
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29.08.2020

## CIRCULAR

It is hereby informed that our Mathematics department is going to conduct the value added course on "Mathematical Economics" for I B.Sc., II B.Sc., and III B.Sc., Mathematics students. Hence the students of Mathematics have to enroll their name to the course coordinator on or before 31.08.2020.

1. I B.Sc., Mathematics - **Mathematical Economics**
2. II B.Sc., Mathematics - **Mathematical Economics**
3. III B.Sc., Mathematics - **Mathematical Economics**

*A. M. Howard No 2.*

Principal

Copy to

1. Principal
2. Office
3. Mathematics Department



*Jan*  
**PRINCIPAL**  
**RAAK ARTS & SCIENCE COLLEGE**  
**VILLIANUR POST-605 110**  
**PERAMBAL.**



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
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## About the College

RAAK Arts and Science College was established in the year 2009; it was affiliated to Thiruvalluvar University, Vellore, Tamil Nadu, India. It started with five Under Graduate degree Programs and 180 students. Today, the college is offering more than eleven Under Graduate degree Programs, three Post Graduate Degree Programs and two Ph.D. Degree Programs. The college has been fostering graduates in Arts, Sciences, Commerce, Business Administration, Social Work, Information Technology and Computer Science. This has resulted in interdisciplinary environment that promotes cross disciplinary learning and research environment to the students. RASC is located in a green campus that has all the necessary infrastructure including laboratories, ICT classrooms, transport facilities etc.

## About the Department

The Mathematics Department is a dynamic and rapidly growing field that has become an integral part of modern society. Mathematics is an interdisciplinary application that has transformed every aspect of human life, from the natural sciences to the social sciences, and has had a profound impact on fields such as biology, computer science, economics, engineering, and physics. Technology has made the world faster, more connected, and more efficient. But this didn't happen by magic. It has been achieved through the brilliant minds of mathematicians who have developed algorithms, models, and statistical methods that power the computer programs and gadgets that we use every day, which are essential for success in today's rapidly changing world.

every single day.

## AGENDA

### Day 1 to 10

Overview of mathematical economics- Calculus review- Introduction to linear algebra- Consumer Theory: Consumer preferences and indifference curves- Budget constraint and budget line- Utility maximization and demand functions- Comparative statics and duality. Production possibilities and isoquants- Cost minimization and supply functions- Comparative statics and duality- Introduction to production function

### Day 11 to 20

Walras' Law and general equilibrium- Existence and uniqueness of general equilibrium- Comparative statics and duality- Applications of general equilibrium. Introduction to game theory- Nash equilibrium and strategic form- Pareto optimality and Nash equilibrium- Applications of game theory

### Day 21 to 30

Introduction to differential equations- Introduction to dynamic programming- Applications of dynamic programming in economics



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## DEPARTMENT OF MATHEMATICS

### VALUE ADDED COURSE

# MATHEMATICAL ECONOMICS

FROM 2/09/2020

TO 31/10/2020

ALL ARE WELCOME



## SYLLABUS

*Jan*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
WILLIANUR POST-605 110  
PERAMBAL.



## Course Title: Mathematical Economics

**Course Description:** This course provides an introduction to the mathematical methods used in economics, including calculus, linear algebra, and optimization techniques. Students will learn how to apply mathematical models to economic problems, including consumer theory, production theory, and general equilibrium.

**Course Duration:** 30 Hours

### UNIT: 1 Introduction to Mathematical Economics (6 Hours)

Overview of mathematical economics-Calculus review- Introduction to linear algebra- Consumer Theory: Consumer preferences and indifference curves- Budget constraint and budget line- Utility maximization and demand functions-Comparative statics and duality

### UNIT: 2 Production Theory (6 Hours)

Production possibilities and isoquants-Cost minimization and supply functions-Comparative statics and duality-Introduction to production function

### UNIT: 3 General Equilibrium (6 Hours)

Walras' Law and general equilibrium-Existence and uniqueness of general equilibrium- Comparative statics and duality-Applications of general equilibrium

### UNIT: 4 Game Theory (6 Hours)

Introduction to game theory-Nash equilibrium and strategic form-Pareto optimality and Nash equilibrium-Applications of game theory

### UNIT: 5 Advanced Topics in Mathematical Economics (6 Hours)

Introduction to differential equations- Introduction to dynamic programming-Applications of dynamic programming in economics

## REFERENCES

1. "Mathematical Economics" by William J. Baumol and Alan S. Blinder
2. "Microeconomic Theory" by Hal R. Varian
3. Online resources such as Khan Academy may be used to supplement the course material.



VALUE ADDED COURSE(2020 -2021)

*Jam*  
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# RAAK ARTS AND SCIENCE COLLEGE

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## MATHEMATICAL ECONOMICS

### SUMMARY REPORT

As technology has become an integral part of our daily lives, our education system has been rapidly embracing technological advancements. This has led to students developing a better understanding of mathematical concepts and enhancing their problem-solving skills. The course has also boosted the confidence of students, enabling them to take up and apply for PSC Tests and other competitive exams for governmental jobs. Furthermore, students appreciated the opportunity to apply mathematical concepts to real-world scenarios, making the learning experience more relevant and engaging.



CO-ORDINATOR

HOD



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# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

FROM

Dr.G.SENTHINATHAN,  
Head & Assistant Professor,  
Department of Business administration  
Raak Arts and Science College,  
Perambai – 605110

TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on " **PREPARATION OF HOUSEHOLD CHEMICALS**" for II students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: PREPARATION OF HOUSEHOLD CHEMICALS**

**Name of the Co-ordinator:**

Dr.G.senthilnathan

**Place:** Perambai

**Date:** 12.08.2019



Yours Faithfully

  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
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14.8.2019

## CIRCULAR

It is hereby informed that our B.SC CHEMISTRY is going to conduct the value added course on "PREPARATION OF HOUSE HOLD CHEMICALS" for II B.SC students. Hence the students of Business Administration have to enroll their name to the course coordinator on or before 16.08.2019

I B.SC - Preparation of household chemicals

*A. M. Chandrasekhar*  
PRINCIPAL

Copy to

1. Principal
2. Office
- 3..Department of chemistry



*Jm*

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
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# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
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### About the College

RAAK Arts and Science College was established in the year 2009; it was affiliated to Thiruvalluvar University, Vellore, Tamil Nadu, India. It started with five Under Graduate degree Programs and 180 students. Today, the college is offering more than eleven Under Graduate degree Programs, three Post Graduate Degree Programs and two Ph.D. Degree Programs. The college has been fostering graduates in Arts, Sciences, Commerce, Business Administration, Social Work, Information Technology and Computer Science. This has resulted in interdisciplinary environment that promotes cross disciplinary learning and research environment to the students. RASC is located in a green campus that has all the necessary infrastructure including laboratories, ICT classrooms, transport facilities etc

### About the Department

In its sojourn towards enthusing students' interest in the subject, the department has focused on three aspects: building a conceptually sound foundation of the subject knowledge; the importance of basic and applied research; and the benefits of the subject in development of the society. The department has adopted traditional as well as modern methods of teaching and has put a lot of emphasis on learning by doing. The seeds of research, entrepreneurship, innovations, team work and efficient working are sown by the qualified staff members by establishing a one to one interaction with students through mentoring sessions.

### AGEN

### DA

### Day 1 to 10

Introduction -Basic programming techniques- Numerical methods- Matrices- Numerical integration and Differential equations- Roots of equations, Random numbers, Integral transforms

### Day 11 to 20

Molecular Dynamic simulations- A sample Molecular Dynamics Program- Monte Carlo Simulations- An example of Monte-Carlo simulations: The Langevin Dynamics- Viscosity of Polymeric Liquids through Monte-Carlo Simulations.

### Day 21 to 30

Installation Gromacs, Packmole, VMD and dChemira- Computations of Radial Distributions Functions PMFs and Diffusion Constants - Molecular Dynamics simulation of water.

### DEPARTMENT OF CHEMISTRY



RAAK ARTS AND SCIENCE COLLEGE

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### VALUE ADDED COURSE

FROM

22/07/2022

TO

17/09/2022

ALL ARE WELCOME

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# RAAK ARTS AND SCIENCE COLLEGE

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## SYLLABUS PREPARATION OF HOUSEHOLD WORKS

### Unit I: Introduction to Analytical Chemistry

- Introduce students to the concept of formulating household chemicals and perfumes using basic chemical principles, Discuss the importance of quality control.

### Unit II: Gravimetric Analysis

- Demonstrate how gravimetric analysis can be used to determine the purity of ingredients in household chemicals and perfumes, Have students prepare a simple household chemical product.

### Unit III: Volumetric Analysis

- Explore the use of volumetric analysis in determining the concentration of key ingredients in household chemicals and perfumes, - Have students prepare a perfume formulation and use titration techniques .

### Unit IV: Instrumental Analysis

- Introduce students to instrumental methods for analyzing complex mixtures in household chemicals and perfumes, - Demonstrate how spectroscopic techniques can be used to identify and quantify ingredients in perfumes.

### Unit V: Separation Techniques

- Explore separation techniques such as chromatography and distillation for isolating and purifying ingredients in household chemicals and perfumes.

  
COURSE COORDINATOR

  
HOD



  
- PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

FROM

## PERMISSION LETTER

Dr.G.SENTHILNATHAN,  
Head & Assistant Professor,  
Department of Business  
administration Raak Arts and  
Science College, Perambai –  
605110

TO

The Principal,  
Raak Arts and Science  
College, Perambai –  
605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "WATER SOIL ANALYSIS" for III B.SC CHEMISTRY students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: Personality Development Name of the Co-ordinator:**

Dr.G.SENTHILNATHAN (I B.SC CHEMISTRY)

**Place:** Perambai

**Date:** 27 .01.2020



Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

29.01.2020

## CIRCULAR

It is hereby informed that our B.SC CHEMISTRY is going to conduct the value added course on "WATER SOIL ANALYSIS" for III B.SC CHEMISTRY students. Hence the students of B.SC CHEMISTRY have to enroll their name to the course coordinator on or before 2.2.2020.

II B.SC CHEMISTRY - WATER SOIL ANALYSIS

*A. M. Harish No. 2.*

PRINCIPAL

Copy to

1. Principal
2. Office
- 3..Department of chemistry




*Jan.*

PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore  
Recognized under section 2(f) of the UGC Act, 1956.

<p><b>About the College</b> RAAK Arts and Science College was established in the year 2009; it was affiliated to Thiruvalluvar University, Vellore, TamilNadu, India. It started with five Under Graduate degree Programs and 180 students. Today, the college is offering more than eleven Under Graduate degree Programs, three Post Graduate Degree Programs and two Ph.D. Degree Programs. The college has been fostering graduates in Arts, Sciences, Commerce, Business Administration, Social Work, Information Technology and Computer Science. This has resulted in interdisciplinary environment that promotes cross disciplinary learning and research environment to the students. RASC is located in a green campus that has all the necessary infrastructure including laboratories, ICT classrooms, transport facilities etc</p> <p><b>About the Department</b> In its sojourn towards enthusing students' interest in the subject, the department has focused on three aspects: building a conceptually sound foundation of the subject knowledge; the importance of basic and applied research; and the benefits of the subject in development of the society. The department has adopted traditional as well as modern methods of teaching and has put a lot of emphasis on learning by doing. The seeds of research, entrepreneurship, innovations, team work and efficient working are sown by the qualified staff members by establishing a one to one interaction with students through mentoring sessions.</p>	<p style="text-align: center;"><u>AGENDA</u></p> <p>ic programming techniques- integration and Differential Equations, Integral transforms</p> <p style="text-align: center;"><u>Day 11 to 20</u></p> <p>Molecular Dynamic simulations-A sample Molecular Dynamics Program- Monte Carlo Simulations- An example of Monte-Carlo simulations: The Langevin Dynamics- Viscosity of Polymeric Liquids through Monte-Carlo Simulations.</p> <p style="text-align: center;"><u>Day 21 to 30</u> Installation Gromacs, Packmol, VMD and Chemira- Computations of Radial Distribution Functions PMFs and Diffusion Constants – Molecular Dynamics simulation of water.</p>	<p style="text-align: center;"><b>DEPARTMENT OF CHEMISTRY</b></p> <p style="text-align: center;"><b>VALUE ADDED COURSE</b></p> <p style="text-align: center;"><b>FROM 22/07/2022 TO 17/09/2022</b></p> <div style="text-align: center;">  <p><b>RAAK ARTS AND SCIENCE COLLEGE</b> <small>Affiliated to Thiruvalluvar University, Vellore Recognized under section 2(f) of the UGC Act, 1956.</small></p> </div> <p style="text-align: center;"><b>ALL ARE WELCOME</b></p>
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*Jan*

**PRINCIPAL**  
**RAAK ARTS & SCIENCE COLLEGE**  
**VILLIANUR POST-605 110**  
**PERAMBALUR**





## SYLLABUS

### WATER AND SOIL ANALYSIS

#### Unit I: Introduction to WATER ANALYSIS

- Introduce students to the importance of water and soil analysis for environmental monitoring and public health
- Discuss the basic principles of sample collection, preservation, and preparation for water and soil analysis

#### Unit II: SOIL

- Demonstrate how gravimetric analysis can be used to quantify the concentration of heavy metals and minerals in soil samples
- Have students perform gravimetric analysis to determine the total dissolved solids in water samples as an indicator of water quality

#### Unit III: SOIL TITRATION

- Explore the use of volumetric analysis, such as titration, for determining the acidity, alkalinity, and nutrient content in water and soil samples
- Have students conduct acid-base titrations to measure the pH and alkalinity of water samples

#### Unit IV: Instrumental Analysis

- Introduce students to instrumental methods, such as spectrophotometry and atomic absorption spectroscopy, for detecting and quantifying contaminants in water and soil samples
- Demonstrate how spectroscopic techniques can be used to identify pollutants, such as pesticides or heavy metals, in environmental samples.

#### Unit V: Separation Techniques

- Explore separation techniques, including chromatography and filtration, for isolating and purifying contaminants in water and soil samples
- Have students design a separation process to extract a specific pollutant from a water sample for analysis.

  
COURSE COORDINATOR

  
HOD



  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

**FROM:**

Mr. R. DEVAKI  
Head & Assistant Professor,  
Department of commerce  
Raak Arts and Science College,  
Perambai – 605110

**TO:**

The Principal,  
Raak Arts and Science College, Perambai – 605110

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

Respected Sir,

This is bringing to your kind notice that we have planned to conduct Value Added Course on “**ONLINE TRADING**” for I M COM & II M COM students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: “ONLINE TRADING”**

**Name of the Co-ordinator: R. DEVAKI**

**Place:** Perambai

**Date:** 17.09.2020

Yours Faithfully

**PRINCIPAL**  
**RAAK ARTS & SCIENCE COLLEGE**  
**VILLIANUR POST-605 110**  
**PERAMBAL.**





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

21.09.2020

## CIRCULAR

It is hereby informed that our Computer science department is going to conduct the value added course on "ONLINE TRADING" for I M COM & II M COM students. Hence the students of Computer science have to enroll their name to the course coordinator on or before 28.09.2020.

I M COM - "ONLINE TRADING"

II M COM - "ONLINE TRADING"

*A. M. Harind No 2.*

Principal

### Copy to

1. Principal
2. Office
3. Department of PG commerce



*Jm*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## ABOUT THE INSTITUTION

RAAK Arts and Science a Co-Education College affiliated to Thiruvalluvar University, Vellore, and Govt. of TN launched in the year 2009. We started with 5 UG courses and 180 students which have now grown up offering 12 UG courses, 7 PG Courses and 2 Ph.D., Courses with and overall strength of around 1500 students. We strive to produce graduates in different streams building strong moral values, well-disciplined with quality education to make them a complete human to face the challenges of the world with courage and commitment and help them lead a successful life building a good society.

## ABOUT THE DEPARTMENT

RAAK Arts and Science College offers department of commerce (PG). Programmes and is manned by experienced and resourceful faculties, with a large number of publications including creative writings and translations. M.Com is a two-year full-time post graduate program that deals with studying various aspects of PG commerce along with Commerce. It is a combination of Commerce for commerce disciplines that require knowledge of computers. This course is designed to equip students with integrated knowledge of commerce. In addition, this course offers ample job opportunities in the Commerce industry. Upon completing.

the course, students can work as Business Analyst, Business Consultant, Auditor, Computer Programmer, App Developer, etc.

## OBJECTIVE OF THE VALUE ADDED COURSE

- To improve employability skills of students.
- To bridge the skill gaps and make students industry ready.
- To provide an opportunity to students to develop inter-disciplinary skills

## ABOUT THE COURSE

The study of online trading encompasses the exploration of methods, strategies, and tools used for buying and selling financial assets via internet-based platforms. It involves understanding financial markets, the intricacies of various financial instruments, and the technological advancements that facilitate online trading. Here's a comprehensive overview of what studying online trading entails Analyzing the Current Business Scenario, Innovation and Creativity.

- Experimentation in Innovation Management Learn about different types of financial markets, including stocks, forex, commodities, and cryptocurrencies.
- Develop risk management techniques to minimize potential losses Sustainability Innovation.



RAAK ARTS AND SCIENCE COLLEGE

**COURSE: ONLINE TRADING**

**VENUE: CLASS ROOM**

**DATE: 01.10.2020**

**Department of Commerce (PG)**

**RAAK Arts & Science College**

Organized by



**Department of Commerce (PG)**

**RAAK Arts & Science College**

**Perambai, Villianur**

**ALL ARE WELCOME**

*Jan.*

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**RAAK ARTS & SCIENCE COLLEGE**  
**WILLIANUR POST-605 110**  
**PERAMBAL.**



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
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## SYLLABUS

**Course Title: ONLINE TRADING**

### COURSE OBJECTIVES

- To familiarize the students to the concept of Online Trading
- To emphasis the concept of efficient market
- To understand the latest developments in online trading

#### Unit I

##### PRIMARY MARKET

Initial Public Offer (IPO) – Introduction

#### Unit II

##### SECONDARY MARKET

Role and Functions of:

Securities and Exchange Board of India (SEBI),  
Stock Exchanges,  
Stock Price Indices,

#### Unit III

##### TRADING

Logging on  
Log Off/Exit from the Application  
Invoking An Inquiry Screen  
Market Watch  
Previous Trades  
Outstanding Orders  
Activity Log  
Order Status  
Market Movement

#### Unit IV

##### METHODOLOGY

Fundamental Analysis  
Technical Analysis



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## Unit V STRATEGIES

Investment Strategies  
Swing Trading Strategies  
Day Trading Strategies

**COURSE COORDINATOR**

**HOD**



  
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**VILLIANUR POST-605 110**  
**PERAMBAL**



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

### FROM

Mr. A. Saravanan,  
Head & Assistant Professor,  
Department of Mathematics,  
Raak Arts and Science College,  
Perambai – 605110

### TO

The Principal,  
Raak Arts and Science College,  
Perambai – 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "Mathematical Statistics " for I M.Sc., and II M.Sc., Mathematics students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: "Mathematical Statistics"**

Name of the Co-ordinator:

Mr.A. SARAVANAN

Place: Perambai

Date : 27.08.2020

Yours Faithfully,

**PRINCIPAL**  
**RAAK ARTS & SCIENCE COLLEGE**  
**MILLIANUR POST-605 110**  
**PERAMBAL.**





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

29.08.2020

## CIRCULAR

It is hereby informed that our Mathematics department is going to conduct the value added course on "Mathematical Statistics" for I M.Sc., and II M.Sc., Mathematics students. Hence the students of Mathematics have to enroll their name to the course coordinator on or before 31.08.2020.

1. I M.Sc., Mathematics - **Mathematical Statistics**
2. II M.Sc., Mathematics - **Mathematical Statistics**

*A. M. H. No 2.*  
Principal

Copy to

1. Principal
2. Office
3. Mathematics Department



*Jan*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAL.





# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## About the College

RAAK Arts and Science College was established in the year 2009; it was affiliated to Thiruvalluvar University, Vellore, Tamil Nadu, India. It started with five Under Graduate degree Programs and 180 students. Today, the college is offering more than eleven Under Graduate degree Programs, three Post Graduate Degree Programs and two Ph.D. Degree Programs. The college has been fostering graduates in Arts, Sciences, Commerce, Business Administration, Social Work, Information Technology and Computer Science. This has resulted in interdisciplinary environment that promotes cross disciplinary learning and research environment to the students. RASC is located in a green campus that has all the necessary infrastructure including laboratories, ICT classrooms, transport facilities etc.

## About the Department

The Mathematics Department is a dynamic and rapidly growing field that has become an integral part of modern society. Mathematics is an interdisciplinary application that has transformed every aspect of human life, from the natural sciences to the social sciences, and has had a profound impact on fields such as biology, computer science, economics, engineering, and physics. Technology has made the world faster, more connected, and more efficient. But this didn't happen by magic. It has been achieved through the brilliant minds of mathematicians who have developed algorithms, models, and statistical methods that power the computer programs and gadgets that we use every day, which are essential for success in today's rapidly changing world.

every single day.

## AGENDA

### Day 1 to 10

Introduction to the course-Overview of statistical inference-Review of probability theory- Probability Theory: Conditional probability-Bayes' theorem-Expected value-Random variable-Probability distributions - Point estimation- Confidence intervals- Methods of estimation-Estimation of parameters (mean, variance, proportion)

### Day 11 to 20

Introduction to hypothesis testing-Types of tests (one-sample, two-sample, paired)-Test statistics (t-test, ANOVA)- P-values and significance testing- Confidence intervals for means and proportions- Confidence intervals for variance and standard deviation- Bootstrap confidence intervals- Confidence intervals for regression coefficients

### Day 21 to 30

Simple linear regression-Multiple linear regression-Regression assumptions (linearity, homoscedasticity, normality)- Model diagnostics (residual plots, influence)-Advanced Topics: Non-parametric methods (Wilcoxon rank-sum test)-Bayesian inference (Bayes' theorem)-Time series analysis (ARIMA models)



RAAK ARTS AND SCIENCE COLLEGE

DEPARTMENT OF  
MATHEMATICS

VALUE ADDED COURSE

**MATHEMATICAL**

**STATISTICS**

FROM 2/09/2020

TO 31/10/2020

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# RAAK ARTS AND SCIENCE COLLEGE

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## SYLLABUS

**Course Title: Mathematical Statistics**

**Course Duration: 30 Hours**

**UNIT: 1 Introduction to Mathematical Statistics (6 Hours)**

Introduction to the course-Overview of statistical inference - Conditional probability-Bayes' theorem-Expected value-Random variable-Probability distributions

**UNIT: 2 Statistical Estimation (6 Hours)**

Point estimation- Confidence intervals-Methods of estimation (ML, MAP, UMVU)  
-Estimation of parameters (mean, variance, proportion)

**UNIT: 3 Hypothesis Testing (6 Hours)**

Introduction to hypothesis testing-Types of tests (one-sample, two-sample, paired)-Test statistics (t-test, ANOVA)-P-values and significance testing

**UNIT: 4 Confidence Intervals (6 Hours)**

Confidence intervals for means and proportions- Confidence intervals for variance and standard deviation-Bootstrap confidence intervals-Confidence intervals for regression coefficients

**UNIT: 5 Regression Analysis (6 Hours)**

Simple linear regression-Multiple linear regression-Regression assumptions (linearity, homoscedasticity, normality)-Model diagnostics--Time series analysis

### REFERENCES

- 1."Mathematical Statistics" by Richard J. Rossi
- 2."Probability and Statistics for Engineers and Scientists" by Ronald E. Walpole
3. Online resources:Khan Academy (statistics course), Stat Trek (online statistics textbook), Mathway (online math problem solver)



*Jan.*  
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Recognized under section 2(f) of the UGC Act, 1956.

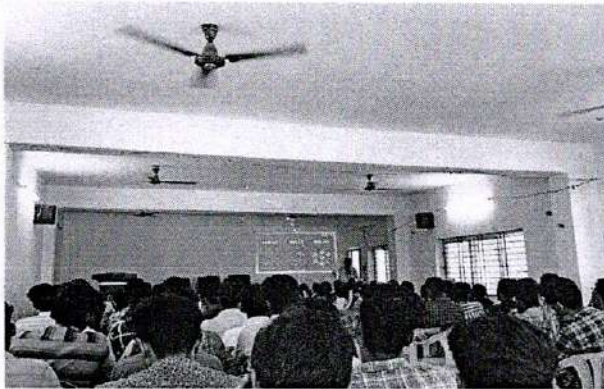
## DEPARTMENT OF MATHEMATICS

### VALUE ADDED COURSE(2020 -2021)


### MATHEMATICAL STATISTICS

### SUMMARY REPORT

As technology has become an integral part of our daily lives, our education system has been rapidly embracing technological advancements. This has led to students developing a better understanding of mathematical concepts and enhancing their problem-solving skills. The course has also boosted the confidence of students, enabling them to take up and apply for PSC Tests and other competitive exams for governmental jobs. Furthermore, students appreciated the opportunity to apply mathematical concepts to real-world scenarios, making the learning experience more relevant and engaging.



  
CO-ORDINATOR

  
HOD



  
PRINCIPAL  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 116  
PERAMBAL.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore.  
Recognized under section 2(f) of the UGC Act, 1956.

## PERMISSION LETTER

**FROM**

Mrs. R.SAKTHIDEVI  
Head & Assistant Professor,  
Department of computer science & Applications  
Raak Arts and Science College,  
Perambai- 605110

**TO**

The Principal,  
Raak Arts and Science College,  
Perambai- 605110

Respected Sir,

**SUB:** Requesting permission for conducting Value Added Course for students - Reg.

This is bringing to your kind notice that we have planned to conduct Value Added Course on "NATURAL LANGUAGE PROCESSING" for I&II M.SC(Computer Science) students. This course is very useful for students to developing their knowledge about their future study. So please give the permission for above said programs.

Thanking you

**Course Name: "NATURAL LANGUAGE PROCESSING"**

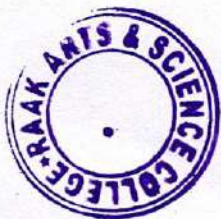
**Name of the Co-ordinator:**

Mrs. R.SAKTHIDEVI

**Place:** Perambai

**Date:** 28.08.2020

S



Yours Faithfully

**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
PERAMBAI.



# RAAK ARTS AND SCIENCE COLLEGE

Affiliated to Thiruvalluvar University, Vellore  
Recognized under section 2(f) of the UGC Act, 1956.

29.08.2020

## CIRCULAR

It is hereby informed that our Computer science department is going to conduct the value added course on "NATURAL LANGUAGE PROCESSING" for I&II M.SC(Computer Science) students. Hence the students of Computer science have to enroll their name to the course coordinator on or before 31.08.2020.

I&II M.SC(Computer science)-"NATURAL LANGUAGE PROCESSING"

*A. M. H. No 2.*  
Principal

Copy to

1. Principal
2. Office
3. CS&BCA



*J.K.*  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
VILLIANUR POST-605 110  
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# RAAK ARTS AND SCIENCE COLLEGE

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## About the College

RAAK Arts and Science College was established in the year 2009; it was affiliated to Thiruvalluvar University, Vellore, Tamil Nadu, India. It started with five Under Graduate degree Programs and 180 students. Today, the college is offering more than eleven Under Graduate degree Programs, three Post Graduate Degree Programs and two Ph.D. Degree Programs. The college has been fostering graduates in Arts, Sciences, Commerce, Business Administration, Social Work, Information Technology and Computer Science. This has resulted in interdisciplinary environment that promotes cross disciplinary learning and research environment to the students. RASC is located in a green campus that has all the necessary infrastructure including laboratories, ICT classrooms, transport facilities etc.

## About the Department

Computer science is a dynamic and rapidly growing area that has become an integral part of the world today. It is an interdisciplinary application and utility of computer programming that has transformed every aspect of human life including biology, businesses, cyber security, economics, engineering, information assurance, languages and linguistics, mathematics, physics, public policy, etc. Today, programming and digitalization are used to address a wider range of complex issues. Technology has made the world better, faster, and more connected. But this didn't happen by magic. It has been achieved to the brilliant minds of IT graduates, who took their passion for technology and used it to create gadgets and computer programs that help the society every single day.

## AGENDA

### Day 1 to 10

:Introduction to NLP(6 hours)

Overview of NLP - History and Evolution - Applications of NLP - Text Processing - Text Preprocessing: Tokenization, Stemming, Lemmatization - Regular Expressions - Text Normalization

### Day 11 to 20

N-grams and Smoothing Perplexity-Introduction to Neural Language Model- Word Embeddings Bag of Words, TF-IDF Word2Vec, GloVe Evaluation of Word Embeddings-Syntax and Parsing- Part-of-Speech Tagging Context-Free Grammars-Dependency Parsing

### Day 21 to 30

Named Entity Recognition (NER)- Sentiment Analysis Word-Sense Disambiguation Machine Translation Statistical-Machine Translation Neural-Machine Translation Attention Mechanisms-Text Classification-Naive Bayes Support-Vector Machines- Neural Networks for Text Classification.



RAAK ARTS AND SCIENCE COLLEGE

DEPARTMENT OF COMPUTER SCIENCE

**VALUE ADDED COURSE**  
**NATURAL LANGUAGE PROCESSING**

FROM 4/09/2020  
TO 31/10/2020

ALL ARE WELCOME



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# RAAK ARTS AND SCIENCE COLLEGE

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## SYLLABUS

**Course Title: NATURAL LANGUAGE PROCESSING**

**Course Description:** This course provides an introduction to the field of Natural Language Processing (NLP), the branch of artificial intelligence that focuses on the interaction between computers and human languages. It covers both theoretical and practical aspects, including text processing, language modeling, syntactic parsing, machine translation, and more.

**Course Duration:** [Insert duration here]

### UNIT 1 :Introduction to NLP(6 hours)

Overview of NLP - History and Evolution - Applications of NLP- **Text Processing** - Text Preprocessing: Tokenization, Stemming, Lemmatization - Regular Expressions - Text Normalization

### UNIT 2:Language Models(6 hours)

N-grams and Smoothing Perplexity-Introduction to Neural Language Model- Word Embeddings Bag of Words, TF-IDF Word2Vec, GloVe Evaluation of Word Embeddings-Syntax and Parsing-Part-of-Speech Tagging Context-Free Grammars-Dependency Parsing

### UNIT 3: Semantic Analysis(6 hours)

Named Entity Recognition (NER)-Sentiment Analysis Word-Sense Disambiguation Machine Translation Statistical -Machine Translation Neural- Machine Translation Attention Mechanisms- Text Classification-Naive Bayes Support -Vector Machines- Neural Networks for Text Classification.

### UNIT 4:Sequence Labeling and Sequence-to-Sequence Models(6 hours)

Hidden Markov Models Conditional Random Fields Seq2Seq Models with LSTM/GRU- Advanced Topics in NLP Transformer Models (BERT, GPT) Transfer Learning in NLP Zero-shot and Few-shot Learning-Speech Processing-Automatic Speech Recognition (ASR)-Text-to-Speech (TTS)-Speech Synthesis

### UNIT 5:Evaluation and Ethics in NLP(6hours)



  
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Evaluation Metrics (Precision, Recall, F1 Score) -Bias and Fairness in NLP -Ethical Consideration -NLP Application -Chatbots and Conversational-Agents Information Retrieval - Question Answering Systems

## Textbooks and References:

- Jurafsky, D., & Martin, J. H. (2009). *Speech and Language Processing* (2nd ed.). Pearson.
- Manning, C. D., Raghavan, P., & Schütze, H. (2008). *Introduction to Information Retrieval*. Cambridge University Press.
- Goldberg, Y. (2017). *Neural Network Methods for Natural Language Processing*. Morgan & Claypool Publishers.



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**DEPARTMENT OF COMPUTER SCIENCE**

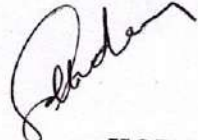
**VALUE ADDED COURSE(2020 -2021)**

**NATURAL LANGUAGE PROCESSING**

**SUMMARY REPORT**

Natural Language Processing (NLP) is a branch of artificial intelligence that focuses on the interaction between computers and human languages. It involves the development of algorithms and models that enable computers to understand, interpret, and generate human language in a way that is both meaningful and useful.

  
**CO-ORDINATOR**

  
**HOD**



  
**PRINCIPAL**  
RAAK ARTS & SCIENCE COLLEGE  
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