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**PERIYAR
MANIAMMAI**
INSTITUTE OF SCIENCE & TECHNOLOGY
Periyar Maniammai Institute of Science & Technology
Periyar Maniammai Institute of Science & Technology
Periyar Maniammai Institute of Science & Technology
think • innovate • transform

DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS

VALUE ADDED COURSES – 2022-2023

Date: 13.03.2023 – 10.04.2023

DATA SCIENCE WITH R PROGRAMMING

Brochure

The brochure cover features a light blue background with a grid pattern. At the top left is the Periyar Maniammai Institute of Science & Technology logo. To its right is the text 'PERIYAR MANIAMMAI INSTITUTE OF SCIENCE & TECHNOLOGY' with a tagline 'think • innovate • transform'. Below this, the text reads: 'Periyar Maniammai Institute of Science & Technology', 'Department of Computer Science and Applications', 'Organizes', 'VALUE ADDED COURSE on', 'DATA SCIENCE WITH R PROGRAMMING'. The date '13.03.2023 - 10.04.2023' is listed on the left, and the co-ordinator 'Ms.G.Umamaheswari Assistant Professor/CSA PMIST' is listed on the right. At the bottom, there is a dark blue image showing a hand interacting with a futuristic digital interface with various icons like a cloud, a person, and a smartphone.

G. Umamaheswari
Co-ordinator

Ms. G. Umamaheswari

Dr. D. Ruby
HOD/CSA

Dr.D.Ruby

Dr. D. RUBY M.C.A., M.Phil., Ph.D
Associate Professor
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DATA SCIENCE WITH R PROGRAMMING

Syllabus:

| S.no | DATE | CONTENT | HOURS |
|------|----------------------------------|--|-------|
| 1. | 13.03.2023 | Introduction to Data Science and R: What is Data Science- Introduction to R and RStudio- Basic R syntax- Data types and data structures | 2 |
| 2. | 14.03.2023- 15.03.2023 | Data Manipulation with R: Data importing and exporting - Data cleaning and preprocessing - Data exploration and visualization - Working with data frames - Tidying data with dplyr. | 6 |
| 3. | 16.03.2023- 17.03.2023 | Statistical Analysis with R: Descriptive statistics - Inferential statistics - Hypothesis testing - Regression analysis - ANOVA and chi-squared tests | 6 |
| 4. | 18.03.2023, 20.03.23-21.03.23 | Machine Learning Basics with R: Introduction to machine learning- Supervised and unsupervised learning- Classification and regression models- Model evaluation and selection- Cross-validation and hyperparameter tuning | 8 |
| 5. | 23.03.23-24.03.23 | Data Visualization with ggplot2 in R: Introduction to ggplot2- Creating various types of plots- Customizing plots- Combining multiple plots | 4 |
| 6. | 25.03.23-27.03.23 | Text Mining and Natural Language: Processing (NLP) with R- Text preprocessing- Text classification-Sentiment analysis. | 4 |
| 7. | 28.03.23-31.03.23 | Big Data Analytics with R: Introduction to big data- Working with SparkR and HadoopR- Distributed computing with R | 4 |
| 8. | 1.04.23-10.04.23 | PROJECTS | 6 |
| | | | 40 |


 Co-ordinator

Ms. G. Umamaheswari


 HOD/CSA

Dr.D.Ruby

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DATA SCIENCE WITH R PROGRAMMING

DEPARTMENT: Department of Computer Science
and Applications

ACADEMIC YEAR:2022-2023
Year:2022-2023

Days:18

Namelist:

| S.NO | REGISTER NUMBER | STUDENT NAME |
|------|-----------------|-------------------|
| 1. | 122012453117 | ADAM MALIK S |
| 2. | 122011453122 | AROKIA JENIFER J |
| 3. | 122011453124 | BUVANI K |
| 4. | 122011453134 | KEERTHIGA K |
| 5. | 122011453136 | KOUSALYA R |
| 6. | 122012453137 | KRISHNAKUMAR P |
| 7. | 122011453138 | MAHALAKSHMI S |
| 8. | 122012453141 | MOHAMMED SHALIH H |
| 9. | 122012453145 | NATESH T |
| 10. | 122011453147 | NIVETHA V |
| 11. | 122011453149 | PAVITHRA T |
| 12. | 122012453150 | PRAVEEN RAJ N |
| 13. | 122012453151 | PRAVEENKUMAR R |
| 14. | 122012453152 | PREMANAND R |
| 15. | 122012453157 | SAKTHI M |
| 16. | 122012453158 | SAMARUL HUQ S |
| 17. | 122012453161 | SARATH R |
| 18. | 122012453162 | SHAIK ABDULLAH A |
| 19. | 122011453164 | SOWMIYA R |
| 20. | 122011453165 | SRIDHANYA P |
| 21. | 122011453166 | SUBASRI M |
| 22. | 122011453168 | SUVETHA T |
| 23. | 122012453170 | TAMILVASAN K |

| | | |
|------|--------------|---------------------|
| 82. | 122011453153 | PRIYADHARSHINI S M |
| 83. | 122011453154 | RAKSHANA NOORA S |
| 84. | 122011453155 | RAMYA R |
| 85. | 122012453156 | ROJER LAWRENCE K |
| 86. | 122012453159 | SANTHOSH KUMAR S |
| 87. | 122011453163 | SHARMILA S |
| 88. | 122012453167 | SURIAPRAHASH R |
| 89. | 122011453169 | SWATHI B |
| 90. | 122012453173 | VISHVA K |
| 91. | 122011453174 | YASHVANTHANA M |
| 92. | 122012453180 | ARUNKUMAR A |
| 93. | 122011453183 | BHUVANESWARI G |
| 94. | 122011453187 | DEEPIKA M |
| 95. | 122011453188 | DEVADHARSINI N S |
| 96. | 122012453190 | FAISAL AHAMED A |
| 97. | 122012453191 | HARIHARAN N |
| 98. | 122012453193 | HARISHCHIDAMBARAM M |
| 99. | 122012453194 | HIJAZ SHAMEER A |
| 100. | 122011453195 | JAYAMALINI P |
| 101. | 122012453200 | KOUSHIK S |
| 102. | 122012453202 | MADHAN R |
| 103. | 122012453203 | MANIKANDAN S |
| 104. | 122011453204 | MERCY DEVAKIRUBAI S |
| 105. | 122012453206 | MOHAMED IRSATH M |
| 106. | 122012453209 | PRADEEP S |
| 107. | 122012453210 | PRADEEPRAJAN I |
| 108. | 122011453211 | PREETHA S |
| 109. | 122011453218 | RITHIKA R |
| 110. | 122011453219 | SAMEERA N |

| | | |
|-----|--------------|------------------|
| 111 | 122012453220 | SANTHOSH R |
| 112 | 122012453221 | SATHISH R |
| 113 | 122012453224 | SRIDHAR C |
| 114 | 122012453225 | SRIRAM S |
| 115 | 122011453228 | SWETHA R |
| 116 | 122011453230 | SWETHAA B |
| 117 | 122011453231 | VAISHNAVI DEVI R |
| 118 | 122012453233 | VASANTHKUMAR D |
| 119 | 122012453235 | VIGNESH S |


CO-Ordinator

Ms.G.Umaheswari


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|------|--------------|----------------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 118. | 122012453233 | Vasanthkumar D | IMCA-B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 119. | 122012453235 | Vignesh S | IMCA-B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

G. V. Vasanth
CO-Ordinator

[Signature]
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Dr. D. RUBY M.C.A., M.Phil., Ph.D
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CERTIFICATE :



DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS

organizes

VALUE ADDED COURSE

ON

DATA SCIENCE WITH R PROGRAMMING


CERTIFICATE

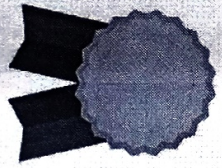
This is to certify that Mr/Ms _____

Adam Malik S

I MCA-A

has participated in "DATA SCIENCE WITH R PROGRAMMING" from 13.03.2023 to 10.04.2023 organised by the Department of Computer Science and Applications, Periyar Maniammai Institute of Science and Technology, (Deemed to be University)Vallam.


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DEAN/FCSE