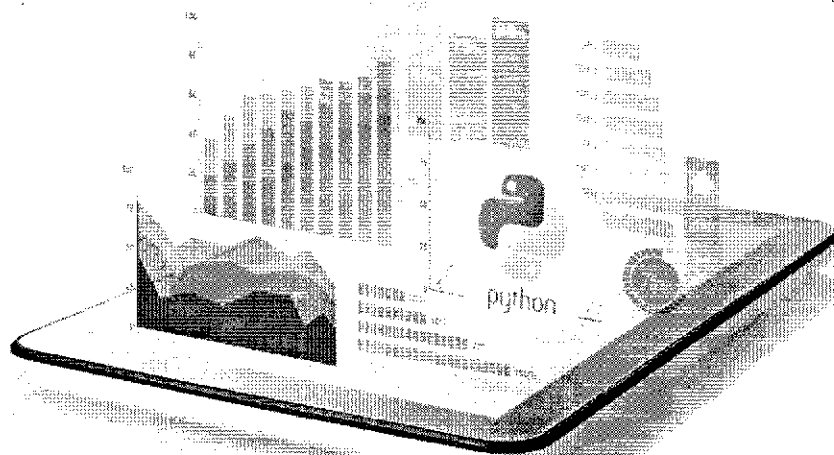
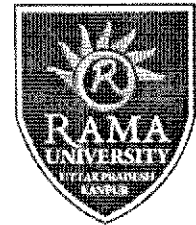


Faculty of
**Engineering &
Technology**



SHORT TERM COURSE ON
**A-Z DATA
SCIENCE: PYTHON**



Begins 13th March, 23



INR 1500/-



Ref: RU/FET/CSE/BOS/2022/001

Dated: 30-April-2022

Department of Computer Science & Engineering, (FET)

Minutes of Meeting

Boards of Studies

A meeting of Boards of Studies of Master of Computer Application held on 30-April-2022 in Dean Office. The following members were present:

1. Prof. (Dr.) Hari Om Sharan - Chairperson
 2. Prof. (Dr.) C. S. Raghuvanshi - Member
 3. Mr. Somendra Tripathi - Member
 4. Dr. Vaishali Dhingra - Member (Invited)
 5. Mrs. Rati Bajpai - Member (Invited)
- The following members agreed to review the minutes in Kanpur.
1. Prof. (Dr.) Anshu Chaturvedi - External Member

Agenda:

1. Action Taken Report (ATR) on the basis of feedback from Stack holder/External member.
2. Action Taken Report (ATR) on the basis of Result Analysis of Session 2020-2021.
3. Consider and Approved Examiner Panel for Session 2021-22 Even Semester.
4. Consider and Approved 02 Short Term Courses:
 - a. Become Data Expert with Oracle
 - b. Data Analytics and Data Science
5. Consider and approve new Evaluation Scheme and Syllabus of 02 Year MCA Program.

S. No.	Item No.	Existing	Recommendation /Action Taken
1	RU/FET/CSE/BOS/2022/001	The Evaluation Scheme and Syllabus is reviewed along with Model Curriculum released by AICTE for MCA	Approve the proposed scheme and syllabus for 02 years MCA program along with 03 pools of specialization and 04 pools of open electives concurrence with Model Curriculum released by AICTE for MCA students to be admitted in the Academic Session 2022-23 onwards till revised



RAMA UNIVERSITY UTTAR PRADESH, KANPUR

(vide U.P. Act No.1 of 2014 as passed by State Legislature and recognized by UGC U/s 2(f))

Ref. No.: RU/Reg./2023/02-B

Date:- 01.02.2023

Office Order

To,

Dean,

Faculty of Engineering. & Technology

Rama University

Dear Sir,

With reference to your submitted proposal dated 18.01.2023, Vice Chancellor pleased to accord permission to career oriented short-term course on "A TO Z Data Science Using Python" by the Department of Computer Science & Engineering subject to approval of Academic Council.


(Registrar)

Copy to:-

1. Secretary to Hon'ble Chancellor.
2. Secretary to Hon'ble Vice-Chancellor.
3. Director Sir
4. Dean Academic Affairs
5. Principal, Faculty of Dental Sciences
6. Controller of Examinations
7. Deputy Registrar/Asst. Registrar
8. Guard File

Registrar
Rama University
Kanpur (U.P.)

To,

The Dean

Faculty of Engineering & Technology

Rama University, Uttar Pradesh

Kanpur, U.P.

India

Subject: Request for disbursement of remuneration /fee of Short Term Course.

Respected sir,

With due respect, we would like to bring your notice that, department of Computer Science and Engineering is running a short term course named "A-Z Data Science using Python" from 12 feb 2023 This is total 8 week course and the prescribed fee for the course is 1500/- Rs and instructor of the course is "Mr. *Surbhit Shukla*". The course is about to complete on or before 15th May and total students registered for the course is 29 and all has paid the fee. List of students with details about the fee is attached herewith.

Here I request you to kindly appreciate the course instructor and do the needful for disbursing the instructor fee as early as possible.

Total enrolled students = 29

Prescribed fee = 1500/-

Total fee deposited by students = $29 * 1500 = 43,500/-$

Faculty Remuneration (70% total fee) = 30450/-

Details of Account:

Account Holder Name- RAMA UNIVERSITY UTTAR PRADESH

Account Number-696820110000037

Account type- CURRENT ACCOUNT

IFSC Code- BKID0006968

Bank of India

with regards

HOD (CSE)

Dr. C.S Raghuvanshi

Handwritten note: Mr. Surbhit Shukla

Handwritten signature and date: 12/05/23

Note Sheet

Rama University

Uttar Pradesh,

Kanpur

Department: Office of
the Dean Academic
Affairs

Ref No. RU/DA.A/2023/

- 046 (10/7/23)

Career Oriented Short term Course " A to Z Data Science using Python " successfully completed by the department of Computer Science Engineer FET. Course Coordinator Mr. Surbhit Shukla conducted evaluation of all the participants and verified by the department head. Total 29 (Twenty Nine) Students enrolled and successfully completed the said course. Kindly release the certificate.

Prof.

10/07/2023

Dean- Academic Affairs
Rama University Uttar Pradesh
Kanpur

- A Career oriented Short term Course Completed by the Faculty of Engineering Prof.
- Qualified Student list attached duly verified by the account Section.
- Recommended for the certificate.
- Put up for approval pl.

RK Shukla

11/7/2023

✓
Registrar/VC

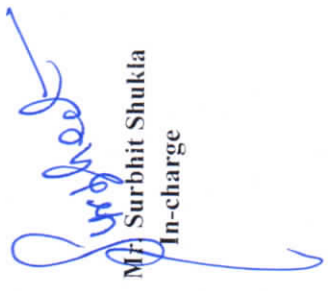
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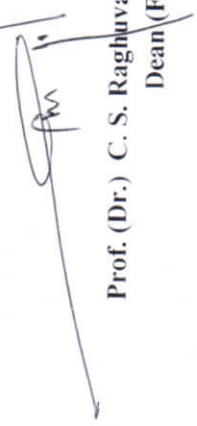
Rama University					
Department Of computer science					
Detail of fee of short Term Course (A-Z Data Science)					
Sr. No.	Student Name	UTR NUMBER	Amount	Date/Time	Verified
1	Amisha Thakur	309418943051	1500	3/6/2023 17:34	
2	Uttam Kumar	309394490848	1500	3/10/2023 11:30	
3	Pawan Rathour	307084648061	1500	3/11/2023 16:40	
4	Bipin Agrahari	343733068849	1500	3/12/2023 15:40	
5	Preeti Sharma	306944090730	1500	3/12/2023 18:16	
6	Kamlendra singh	306917483271	1500	3/12/2023 21:27	
7	PRAKASH SINGH	343818637321	1500	3/13/2023 12:01	
8	Pranshu katiyar	343831974003	1500	3/13/2023 15:46	
9	Ayush Anand	308372269257	1500	3/13/2023 17:39	
10	Rishabh Savita	307202783023	1500	3/13/2023 18:30	
11	Abhishek maddheshiya	307272746349	1500	3/13/2023 23:20	
12	Dilip kumar gupta	307219099043	1500	3/13/2023 23:43	
13	Shruti Subramanyan	307326925989	1500	3/14/2023 11:26	
14	Tiwari Prabhat brijnand	307375171043	1500	3/14/2023 12:10	
15	Shashwat raghuvanshi	343979545969	1500	3/14/2023 12:10	
16	Pragya Pathak	307318457229	1500	3/14/2023 14:22	
17	Ritu Raj Kashyap	307332426827	1500	3/14/2023 17:52	
18	Sankalp Dubey	307460549281	1500	3/15/2023 19:52	
19	Durgesh yadav	307518721309	1500	3/16/2023 22:33	
20	Serwat Hussain	307676754881	1500	3/17/2023 13:29	
21	Sumit Yadav	344535275330	1500	3/21/2023 9:43	
22	Alok Rathour	306523354673	1500	3/24/2023 15:39	
23	Saumya Dubey	308688584312	1500	3/27/2023 13:22	
24	Deepa Singh	309021658027	1500	3/31/2023 12:09	
25	Chandranshu Shukla	309311042909	1500	4/3/2023 10:44	
26	Reshu Singh Bundela	307170466710	1500	4/3/2023 13:34	
27	Sonal Sharma	309399137035	1500	4/3/2023 17:10	
28	Anuj Singh	307266634247	1500	4/4/2023 16:30	
29	Tanya Rawat	347103728474	1500	4/16/2023 13:41	

Shubay
23/6/23
 All Payments Received in A/c No
 696820110000037
 (Rama University)
Shubay
23/6/23

Rama University, Uttar Pradesh Kanpur,

2023-2024	FACULTY OF ENGINEERING AND TECHNOLOGY				w.e.f. : 15-02-2023	
Department of Computer Science & Engg.						
Time Table of Short Term Course: A-Z Data Science Using Python						
Course: B. Tech.			Branch: CS			
Room No. 03066						
Day & Time	MON	TUE	WED	THU	FRI	
	04:10- 05:00 PM	04:10- 05:00 PM	04:10- 05:00 PM	04:10- 05:00 PM	04:10- 05:00 PM	
SUBJECT CODE/ SUBJECT NAME	FACULTY					Room No.
A-Z Data Science Using Python	Mr. Surbhitt Shukla					03066


Mr. Surbhitt Shukla
In-charge


Prof. (Dr.) C. S. Raghuvanshi
Dean (FET)

RAMA UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Attendance Analysis

Short of course : A-Z data science :PYTHON

S.NO	STUDENT NAME	february(10)	march(20)	april(20)	may(10)	Total Attendance
1	Abhishek maddheshiya	80	75	80	40	68.75
2	Alok Rathour	75	72	75	45	66.75
3	Amisha Thakur	72	73	72	60	69.25
4	ANUJ singh	66	80	66	77	72.25
5	Bipin Agrahari	72	74	72	60	69.5
6	Chandranshu Shukla	80	80	80	70	77.5
7	Deepa Singh	66	75	66	60	66.75
8	Dilip kumar gupta	65	80	65	70	70
9	Durgesh yadav	66	77	66	70	69.75
10	Kamlendra singh	70	80	70	60	70
11	Pawan Rathour	75	75	75	65	72.5
12	Pragya Pathak	75	75	75	75	75
13	Prakash singh	72	72	72	65	70.25
14	Pranshu katiyar	77	65	70	50	65.5
15	Preeti Sharma	60	80	60	55	63.75
16	Reshu Singh Bundela	70	80	70	72	73
17	Rishabh Savita	70	60	70	68	67
18	Ritu Raj Kashyap	78	78	78	70	76
19	Sankalp Dubey	77	77	77	65	74
20	Saumya Dubey	50	70	50	65	58.75
21	Serwat hussain	67	75	67	60	67.25
22	Shashwat raghuvanshi	85	90	85	75	83.75
23	Shruti Subramanyan	80	90	80	70	80
24	Sonal Sharma	75	80	75	75	76.25
25	Sumit Yadav	75	80	75	65	73.75
26	Tanya Rawat	67	75	67	65	68.5
27	Tiwari Prabhat brijnandhan	70	95	70	75	77.5
28	Uttam Kumar	75	80	75	50	70
29	Yash Khare	70	75	70	55	67.5

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08/07/23

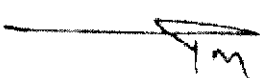
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10.07.2023

RAMA UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Result Analysis

Short of course : A-Z data science :PYTHON

S.NO	STUDENT NAME	Score in Assisment		Project Grade
		1	2	
1	Abhishek maddheshiya	12	14	B
2	Alok Rathour	14	15	A
3	Amisha Thakur	12	13	B
4	ANUJ singh	13	11	B
5	Bipin Agrahari	15	13	A
6	Chandranshu Shukla	12	10	B
7	Deepa Singh	12	10	B
8	Dilip kumar gupta	11	13	B
9	Durgesh yadav	14	11	B
10	Kamlendra singh	15	12	A
11	Pawan Rathour	12	14	B
12	Pragya Pathak	14	10	B
13	Prakash singh	12	12	B
14	Pranshu katiyar	11	14	B
15	Preeti Sharma	10	12	B
16	Reshu Singh Bundela	11	13	B
17	Rishabh Savita	14	15	B
18	Ritu Raj Kashyap	12	15	B
19	Sankalp Dubey	14	14	B
20	Saumya Dubey	10	12	B
21	Serwat hussan	14	15	A
22	Shashwat raghuvanshi	15	16	A+
23	Shruti Subramanyan	14	15	A
24	Sonal Sharma	12	12	B
25	Sumit Yadav	11	13	B
26	Tanya Rawat	10	11	B
27	Tiwari Prabhat brijnandhan	15	17	A
28	Uttam Kumar	12	14	B
29	Yash Khare	10	13	B


15/07/2017

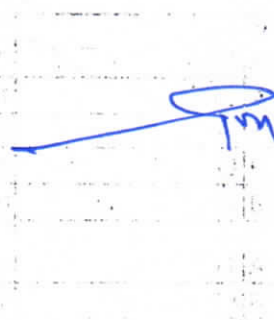
RAMA UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Result Analysis

Short of course : A-Z data science :PYTHON

S.NO	STUDENT NAME	Score in Assisment 1	Score in Assisment 2	Project Grade	Pass/ Fail
1	Abhishek maddheshiya	12	14	B	Pass
2	Alok Rathour	14	15	A	Pass
3	Amisha Thakur	12	13	B	Pass
4	ANUJ singh	13	11	B	Pass
5	Bipin Agrahari	15	13	A	Pass
6	Chandranshu Shukla	12	10	B	Pass
7	Deepa Singh	12	10	B	Pass
8	Dilip kumar gupta	11	13	B	Pass
9	Durgesh yadav	14	11	B	Pass
10	Kamlendra singh	15	12	A	Pass
11	Pawan Rathour	12	14	B	Pass
12	Pragya Pathak	14	10	B	Pass
13	Prakash singh	12	12	B	Pass
14	Pranshu katiyar	11	14	B	Pass
15	Preeti Sharma	10	12	B	Pass
16	Reshu Singh Bundela	11	11		Pass
17	Rishabh Savita	14	14		Pass
18	Ritu Raj Kashyap	12	13	B	Pass
19	Sankalp Dubey	14	14	B	Pass
20	Saumya Dubey	10	12	B	Pass
21	Serwat hussain	14	15	A	Pass
22	Shashwat raghuvanshi	15	16	A+	Pass
23	Shruti Subramanyan	14	15	A	Pass
24	Sonal Sharrna	12	12	B	Pass
25	Sumit Yadav	11	13	B	Pass
26	Tanya Rawat	10	12		Pass
27	Tiwari Prabhat brijnandhan	15	15		Pass
28	Uttam Kumar	12	12		Pass
29	Yash Khare	10	13	B	Pass


 28/07/23


 10.07.2023

Rama University, Uttar Pradesh, Kanpur

Proposal of
CAREER ORIENTED SHORT TERM COURSE

On

A to Z Data Science Using Python



Offered by

Department of Computer Science and Engineering

Faculty of Engineering and Technology

CONTENTS

Pages

Part: 1- Ordinance governing career oriented short term course

- I- General Provision**
 - A- Eligibility**
 - B- Course Fee**
- II- Admission Procedure**
- III- Conduct of the Course**
- IV- Attendance Rules**

Part: 2- Course Detail

- I- Course Structure and Evaluation**
- II- Course Syllabi of A to Z Data Science Using Python**
- III- Significance of Course**
- IV- Employment Opportunity**

Part: 1

Ordinance Governing

Career Oriented Short Term Course

A to Z Data Science Using Python

I. General Provisions

1. The program of study leading to Career Oriented Short Term Course (Certificate Program) offered Department of Computer Science & Engineering, FET, Rama University Uttar Pradesh, Kanpur shall be of Eight weeks, and shall be basically for the persons who are having interest in this field of data science or they want to build their career as a **Data Scientist** or Data Engineering or Machine Learning Engineering. The program shall have the status of Add-on Skill Oriented Program under Career Oriented Sort Term Course.
2. The Certificate programs shall have the status of "Short Term Courses" of Rama University Uttar Pradesh, Kanpur and shall be governed by the general rules of the Short Term Courses.
3. The intake to the Certificate Courses shall be 30, which may be increased to 60 (Two Batches) in due course of time by a resolution of the University.
4. The Program of study leading to Career Oriented Short Term Course (Certificate Program) of the Rama University Uttar Pradesh, Kanpur shall be conducted in the Department of Computer Science and Engineering under the Faculty of Engineering and Technology in the evening hours or during any such duration which would be appropriate.
5. The admission to Career Oriented Short Term Course (Certificate Program) shall be dealt with by the Dean, Faculty of Engineering and Technology. The last date for the receipt of the application form shall be fixed by the Dean of the Faculty of Engineering and Technology.
6. The candidate seeking admission will have to apply on a prescribed format available from the University/ Faculty on payment of prescribed fee.
7. The candidate may be required to pay the processing fee as directed by the Faculty from time to time. No Application Form shall be considered for admission unless it is complete in all respects including attested copies of the photographs of the candidates containing his/her signature thereon and all necessary documents are attached thereto, such as:
 - a) Attested copies of mark-sheets of all the examinations passed;
 - b) Certificate from an appropriate authority certifying that the candidate belongs to Scheduled Caste/Scheduled Tribe/OBC or that the candidate is Physically Challenged.
8. The provisional admission to the course shall be made in order of merit based or on the candidate's performance in TEST/GD/PI, and academic record.
9. The complete Application Forms for registration at Faculty of Engineering and Technology, Rama University Uttar Pradesh, Kanpur along with documents required under ordinance at above point 6 shall be sent to the Registrar.

10. Provisional admission cannot be claimed by any applicant as a matter of right. The provisional admission or readmission of an applicant shall be entirely at the discretion of the Admission Committee, which may refuse to admit any candidate without assigning any reason thereof.

11. Provisional admission will be made strictly on combined merit and availability of seats on the date of admission and the mere fact that call letter has been issued shall not entitle a candidate to claim admission.

12. The candidate granted provisional admission shall deposit fee within the period prescribed by the Admission Committee failing which, the admission shall stand cancelled.

13. Provisional admission of a candidate is liable to be cancelled at any time:

i) If it is detected that, there is something against the candidate which would have prevented him/her from being admitted to the Program.

ii) If the candidate is found at a later stage to have provided any false information, and /or

iii) If he/she has been punished for an act of gross misconduct, indiscipline or an act involving moral turpitude.

13. There shall be an Admission Committee for Career Oriented Short Term Course (Certificate Programs), constituted under the provisions of Ordinances and consisting of the Dean or his nominee. Admission shall be made in accordance with these ordinances and the rules made there under.

A. Eligibility:

i) The candidate seeking admission to Career Oriented Short Term Course must be completed 10+2 from any recognized board/Institute in any stream.

B. Intake & Reservations:

The intake to Career Oriented Short Term Course shall be 30. The reservation in admission shall be as per rules.

Reservations:

SC Candidates 15 % of the intake ST Candidates 7.5% of the intake PC Candidates 3% of the intake (on horizontal reservation basis) OBC Candidates 27% of the intake

(a) The candidates seeking admission under the above categories must fulfill the minimum eligibility conditions and qualifying requirements.

(b) The SC/ ST/OBC candidates must enclose attested copy of the caste certificate along with their Application Form stating that the candidate belongs to SC/ST/OBC Category.

The following are empowered to issue SC/ST/OBC Certificates:

(I) District magistrate/ Additional District Magistrate/ Collector/ Deputy Commissioner/ Addl. Deputy Commissioner/Deputy Collector /1st Class Stipendiary Magistrate/City Magistrate/Sub Divisional magistrate/ Taluka Magistrate/ Executive Magistrate /Extra Assistant Commissioner.
(ii) Chief Presidency Magistrate/ Addl. Chief Presidency Magistrate/ Presidency Magistrate.

(iii) Revenue Officer not below the rank of Tehsildar.

(iv) Sub-Divisional Officer of the area where the candidate and/or his family normally resides. (v) Administrator/Secretary to the Administrator/ Development Officer (Lakshadweep Islands). (vi) Candidate must note that certificate from any other person/authority shall not be accepted in any case.

(c) 3% seats on horizontal reservation basis shall be reserved for Physically Challenged Candidates (i) 1% for Visually Impaired (ii) 1% for Hearing Impaired (iii) 1% for Orthopedically Handicapped. In case no candidate is available in any of the above three sub-categories, the unfilled seats shall be filled by the candidates belonging to the remaining sub-categories.

A candidate applying under PC category must attach a certificate by CMO, District Hospital. However, he/she will be considered under PC category only after verification from the University Medical Board. Admit cards for admission shall be issued to such candidates only on production of the above-mentioned verification certificates from the Medical Board constituted by the University for the purpose.

(d) Separate final merit list will be prepared for the candidates under each of the above categories.

(e) Vacant seats reserved for SC/ST/OBC candidates, if any, may be filled up as per rules.

B. Course Fee:

a) The Program will run as a Short Term Course of Study as prescribed under the Career Oriented Short Term Course (Certificate Programs) of Rama University Uttar Pradesh, Kanpur.

b) The Short Term Course fee may vary as per the course.

II. ADMISSION PROCEDURE

1. Admission to Career Oriented Short Term Course (Certificate Programs) shall be made in order of merit.

2. The admission process may be reviewed as per need from time to time.

III. CONDUCT OF THE COURSE

1. To qualify for the Career Oriented Short Term Course (Certificate Programs), the candidate must submit the assignments/projects as contained in the Course structure / syllabus detailed herein after.

2. The students shall be permitted to simultaneously pursue any one of the proposed program at a time along with their regular diploma/degree program.

IV. ATTENDANCE RULES

(a) A student is required to have full, i.e., 100%, attendance and exemption up to 25% can be considered for specific cogent reasons. Out of this 25%, only 10% exemption will be permitted without taking any application from the student. Rest 15% exemption may be given by the Dean. The cogent reasons for exemption are given below:

(i) Participation in NCC/NSC/NSS Camps duly supported by certificate.

(ii) Participation in University or College Team Games or Interstate or Inter University tournaments, duly supported by certificate from the Secretary of the University Sports Board or President of the College Athletic Association concerned.

(iii) Participation in Educational Excursions, which form a part of teaching in any subject conducted on working days duly certified by the Dean.

(iv) University Deputation for Youth Festival duly certified by the Dean.

(v) Prolonged illness duly certified by the Medical Officer or the Superintendent, Rama Hospital, Rama University or any other Registered Medical Practitioner, provided such certificate is submitted to the Dean, Faculty of Engineering and Technology in time.

(vi) No relaxation beyond 25% shall be considered in any case.

(b) The attendance of a newly admitted candidate shall be counted from the date of his/her admission, or date of beginning of classes whichever is later, while in the case of promoted candidates, attendance shall be counted from the date on which respective class begins.

(c) There shall be an Attendance Monitoring Committee in the Faculty under the Chairmanship of the Dean.

Part: 2

Course Detail

Career Oriented Short Term Courses.

A to Z Data Science Using Python

I. COURSE STRUCTURE AND EVALUATION:

Candidates for the Career Oriented Short Term Course (Certificate Programs) shall be evaluated on the basis of Assignments/Projects in accordance with the syllabi or course prescribed in the Ordinances.

Here are a few things you must know about the course that will help you understand the relevance and admission-related details about the course.

About The Course:

Designed to give recent graduates and experienced professionals, an extensive Data Science education. This short term program is a blend of online self-paced videos, live virtual classes, hands-on projects, and labs, with mentorship sessions to provide a high-engagement learning experience and real-world applications to help you master essential Data Science skills. This program offers in-depth exposure to technologies including Python, Machine Learning, Deep Learning, Natural Language Processing, and prepares you for an exciting career in Data Science.

Duration:

- Total 8 weeks, 6 Lectures per week

Course Fees:

- INR 1500

Instructor:

- Dean/HoD will decide as per availability.

Eligibility:

- Diploma, BCA, B.Sc.(CS) B.Tech., M.Sc. (CS), MCA, and M.Tech.

Courseware:

- Course material is provided in printed / electronic form.

Mode:

- Offline.

Evaluation System:

- Based on the Assignments and Final project report.

II. Course Syllabus:

A to Z Data Science Using Python

Want to know about the syllabus of Data Science? The Data Science course syllabus comprises three main components, i.e. Data Analytics, Machine Learning and Modeling in Data Science. Across these three main components, the subjects are cover varied areas of this sought-after discipline. Here is the complete Data Science Syllabus:

- Hands on Python
- Python Libraries: Numpy, Pandas, Matplotlib, Seaborn
- Introduction to Data Science
- Mathematical & Statistical Skills
- Machine Learning & Scikit Learn
- Deep Learning and Tensor flow
- Experimentation, Evaluation and Project Deployment Tools
- Exploratory Data Analysis
- Business Acumen & Artificial Intelligence
- 2 Live Projects each Week

III. Significance of Course

- According to IDC, by 2025, global data will grow to 175 zettabytes. Data Science enables companies to efficiently understand gigantic data from multiple sources and derive valuable insights to make smarter data-driven decisions. Data Science is widely used in various industry domains, including marketing, healthcare, finance, banking, policy work, and more. That explains why Data Science is important.
- There are various reasons why Data Science is important in business. Data Science enables enterprises to measure, track, and record performance metrics for facilitating enterprise-wide enhanced decision making. Companies can analyze trends to make critical decisions to engage customers better, enhance company performance, and increase profitability. Data Science models use existing data and can simulate several actions. Thus, companies can devise the path to reap the best business outcomes. Data Science helps organizations

identify and refine target audiences by combining existing data with other data points for developing useful insights. Data Science also helps recruiters by combining data points to identify candidates that best fit their company needs.

IV. EMPLOYMENT OPPORTUNITY:

Data science experts are needed in virtually every job sector—not just in technology. In fact, the five biggest tech companies—Google, Amazon, Apple, Microsoft, and Facebook. However—in order to break into these high-paying, in-demand roles—an advanced education is generally required.

“Data scientists are highly educated—88 percent have at least a master’s degree and 46 percent have PhDs—and while there are notable exceptions, a very strong educational background is usually required to develop the depth of knowledge necessary to be a data scientist,” reports KDnuggets, a leading site on Data Science.

1. Data Scientist

Average Salary: 20-30 LPA

Typical Job Requirements: Find, clean, and organize data for companies. Data scientists will need to be able to analyze large amounts of complex raw and processed information to find patterns that will benefit an organization and help drive strategic business decisions. Compared to data analysts, data scientists are much more technical.

2. Machine Learning Engineer

Average Salary: 20-25 LPA

Typical Job Requirements: Machine learning engineers create data funnels and deliver software solutions. They typically need strong statistics and programming skills, as well as knowledge of software engineering. In addition to designing and building machine learning systems, they are also responsible for running tests and experiments to monitor the performance and functionality of such systems.

3.. Machine Learning Scientist

Average Salary: 20-25 LPA

Typical Job Requirements: Research new data approaches and algorithms to be used in adaptive systems including supervised, unsupervised, and deep learning techniques. Machine learning scientists often go by titles like Research Scientist or Research Engineer.

4. Data Architect

Average Salary: 12-15 LPA

Typical Job Requirements: Ensure data solutions are built for performance and design analytics applications for multiple platforms. In addition to creating new database systems, data architects often find ways to improve the performance and functionality of existing systems, as well as working to provide access to database administrators and analysts.

5. Infrastructure Architect

Average Salary: 12-15 LPA

Typical Job Requirements: Oversee that all business systems are working optimally and can support the development of new technologies and system requirements. A similar job title is Cloud Infrastructure Architect, which oversees a company's cloud computing strategy.

6. Business Intelligence (BI) Developer

Average Salary: 10-12 LPA

Typical Job Requirements: BI developers design and develop strategies to assist business users in quickly finding the information they need to make better business decisions. Extremely data-savvy, they use BI tools or develop custom BI analytic applications to facilitate the end-users' understanding of their systems.

7. Statistician

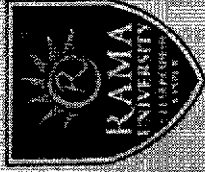
Average Salary: 10 LPA

Typical Job Requirements: Statisticians work to collect, analyze, and interpret data in order to identify trends and relationships which can be used to inform organizational decision-making. Additionally, the daily responsibilities of statisticians often include design data collection processes, communicating findings to stakeholders, and advising organizational strategy.

8. Data Analyst

Average Salary: 8-10 LPA

Typical Job Requirements: Transform and manipulate large data sets to suit the desired analysis for companies. For many companies, this role can also include tracking web analytics and analyzing A/B testing. Data analysts also aid in the decision-making process by preparing reports for organizational leaders which effectively communicate trends and insights gleaned from their analysis.



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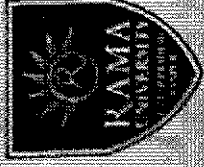
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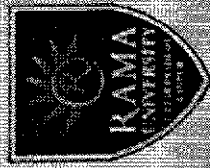
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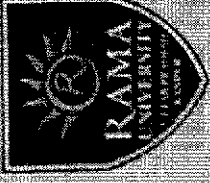
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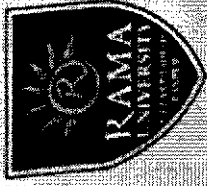
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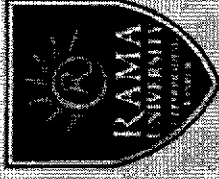
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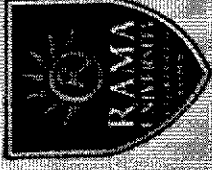
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