# **DATA SCIENCE FOR ENGINEERS**

# **General Questions**

1. What is the class timing?

#### Answer:

There is no concept of class timing. These are pre-recorded online videos. The lectures are released week-wise, they will be available for viewing anytime and anywhere.

2. What are packages that need to be installed in R for this course after installing R and R Studio?

### Answer:

In the R and R studio installation instructions, the list of packages to be installed are also specified. Please have a look and install them.

3. Is week 0 taken into consideration for the certification Percentage.

## Answer:

Assignment 0 will not be taken for the certificate percentage. It is a prerequisite assignment just to test yourself.

4. R -- How I can check that R is installed correctly with all the required packages and Backports Packages on Ubuntu.

### Answer:

We have not worked with ubuntu. Hope the following link helps. It contains the installation instructions for R studio in Ubuntu.

https://www.r-bloggers.com/download-and-install-r-in-ubuntu/

Once you have installed the software properly, you can install the packages. The installed packages will get reflected on your package tab in R studio interface.

## 5. CODE:

install.packages("plyr", "dplyr", dependencies = TRUE) this code is not working give error as

Error: unexpected input in "install.packages(\*)"

# Answer:

Don't copy the syntax as it is, type it out that will solve the issue.

6. How to know if the assignment is single attempt or multi-attempt -that is if we could come back and resubmit our assignment or only one chance is given?

### Answer:

There can be multiple attempts for any given assignment. The last submission is considered for evaluation.

7. How to get R study material?

### Answer:

The material is available on the course page. On the top left in the course outline, click on Week 0 to find the course material.

8. What are the CRAN Mirrors to be selected to install prescribed packages?

Answer:

Please find below the link of the official site where you can get the list of mirrors. You can choose any of them since mirroring is used to relieve the load of having many downloads hitting the same server.

https://cran.r-project.org/mirrors.html

9. Can we download the lectures?

## Answer:

As far as this course is concerned, you cannot download the lecture videos. You will be able to view them online.

10. While trying to install packages like "plyr", "dplyr", "reshape2" etc., It shows the below error in the console. Please suggest how to rectify it.

Error in install.packages: cannot open file 'C:/Users/e017tx/Documents/R/win-library/3.4/file14d43c66206f/Rcpp/doc/Rcpp-attributes.pdf': Permission denied.

#### Answer:

Usually you need administrator rights to change things in program files. Try running R Gui as administrator.

11. After downloading and installing R and Rstudio, not able to install the packages as mentioned. Also, not getting the screen as Rstudio, rather getting a screen as RGui.

### Answer:

Kindly make sure that you are opening R studio not R. In R studio you will be able to download all the packages needed.

12. It was mentioned that weekly Assignment are considered for 25% of the Final score. Could you tell me if the average of all the Assignment are considered or best 6 out of 8 Assignment are considered for the final score.

#### Answer:

Best 6 out of 8 Assignment are considered for the final score.

13. In case of multiple assignments in a week, how will they be marked?

## Answer:

If the week has two assignments, then the average of 2 assignments will be considered as that week's assignment score. Finally best 6 out of 8 will be considered for the final score.

14. How to find the lcm, Hessian, eigenvalues in r studio.

### Answer:

Kindly find below the link which provides the documentation for using hessian() in R

https://cran.r-project.org/web/packages/numDeriv/numDeriv.pdf

To find the lcm in Rstudio, there is no inbuilt function in Rstudio. You have to write your own function.

To find the Eigenvalues, use the command eigen().

15. How to practice r programming? Should we download the software from net? Any trusted or recommended website for download?

## Answer:

Yes, you would need to use R software.

R is an open source software, it can be downloaded from the following URLs:

Basic R>> https://cran.r-project.org/bin/windows/

Visual Studio like interface>> https://www.rstudio.com/products/rstudio/download/

16. What if I am not working in India, during the exam time? Will it be possible to give exam online?

#### Answer:

That is not possible.

17. How to approach this course coming from a non-coding background?

## Answer:

Data science for engineers course does not require any programming background. We start from the Basics of R coding from week 1. Please go through the week 1 videos to get comfortable with the basics.

18. How to access the lecture material? There is no pdf provided in this course.

# Answer:

We will not be sharing the slides for the lectures. Kindly go through the videos for your reference.

19. Is the course domain specific like for mechanical engineers or chemical engineers or will general data science be covered?

#### Answer:

Case studies are not specific to any domain. Once you learn the algorithms you can apply it to your domain.

20. Whether it is a 2 credit course or 3 credit course.

### Answer:

It is a 2 credit course.

21. Reference books for mathematics, R and Data science.

### Answer:

Suggested reading materials:

Introduction to linear algebra -Gilbert Strang

Applied statistics and probability for engineers – Douglas Montgomery

Elements of Statistical learning - Jerome H. Friedman, Robert Tibshirani, and

Trevor Hastie

Introduction to Statistical learning with Applications in R.

22. How to see the documentation of any function in R as like in spyder and jupyter notebook? is there any short cut?

#### Answer:

Kindly go to help tab and search any particular topic.

23. Is it mandatory to go through the documents in prerequisite section or it will be covered in lectures?

## Answer:

It will be covered in lectures. But it is better if you can go through it before the day's lecture.

24. Where will be prerequisite of R programming in data science will be available? **Answer:** 

Kindly check under the Week-0 tab

25. What is the exam process of data science? I mean is the exam will be online or offline mode?

# Answer:

Final exam will be conducted through online.

26. Once the video is released, is it possible to view it multiple number of times Or, would the previous content be removed when the new content is uploaded?

## Answer:

You will be able to view the videos multiple number of times.

27. Whether can we use the tool like 'R' to solve the assignment or manually interpret the code and answer.

## Answer:

Try both the ways. It will help you to learn a lot.

28. How to download audio lessons or ppts or pdfs?

### Answer:

Please check under text transcripts tab.