

Practice Module (Project & Examination) Briefing

Graduate Certificate in
Business Analytics Project

13 January 2021

6:30-7:30pm





Agenda

- Requirements of the Graduate Certificate
- Requirements of the Practice Module
- Overall Graduate Certificate Assessment
- Assessment Components & Schedule
- Project proposal and acceptance criteria
- Project Presentation and Report



Requirements of the Graduate Certificate (old)

Module	Objective
Statistics Bootcamp (SB)	R functions for statistical analysis, interactive visual analytics, Compare and evaluate different business strategies, Make predictions based on relevant factors, Make better data-driven decision , Visualising and summarising data for quick insights, Compare and evaluate different business strategies, Prediction based on relevant factors, Industry application examples.
Predictive Analytics - Insights of Trends and Irregularities (PA)	Identify where predictive analytics can be applied, benefits which can be derived, Evaluate predictive model's objectives and data available, Design the predictive analytics process. Analyse the results and communicate the decision to senior management and facilitate deployment to support the end users,
Text Analytics (TA)	Identify main themes or topics in the collection of documents or textual data, Discover relationships and patterns among topics, Categorise documents based on discovered topics and user-definable criteria,
Data Analytics Business Process (DABP)	This is a course that provides an end to end view of data analytics process. It helps to appreciate the underlying best practices by covering topics like aligning analytics objectives with business goals, techniques for data transformation, exploration, data warehousing basics, data pipeline process. The participants can also design strategies for implementation of analytics projects.
Recommender Systems (RCS)	Build Recommender Systems to provide recommendations and choices of interest to users in terms of “Relevant Job postings”, “Movies of Interest”, “Suggested Videos”, “People who bought this also bought this” etc

- Demonstrate **understanding and mastery** of the skills taught in the above course modules in a **group project**
- Pass the **written examination** based on the scope of the above course modules
- Qualify (based on ISS-NUS criteria) for the entire certificate



Requirements of the Graduate Certificate (new)

Module	Objective
Statistics Bootcamp II (SB II)	R functions for statistical analysis, interactive visual analytics, Compare and evaluate different business strategies, Make predictions based on relevant factors, Make better data-driven decision , Visualising and summarising data for quick insights, Compare and evaluate different business strategies, Prediction based on relevant factors, Industry application examples.
Predictive Analytics - Insights of Trends and Irregularities (PA)	Identify where predictive analytics can be applied, benefits which can be derived, Evaluate predictive model's objectives and data available, Design the predictive analytics process. Analyse the results and communicate the decision to senior management and facilitate deployment to support the end users,
Text Analytics (TA)	Identify main themes or topics in the collection of documents or textual data, Discover relationships and patterns among topics, Categorise documents based on discovered topics and user-definable criteria,
Data Analytics Business Process II (DABP II)	This is a course that provides an end to end view of data analytics process. It helps to appreciate the underlying best practices by covering topics like aligning analytics objectives with business goals, techniques for data transformation, exploration, data warehousing basics, data pipeline process. The participants can also design strategies for implementation of analytics projects.

- Demonstrate **understanding and mastery** of the skills taught in the above course modules in a **group project**
- Pass the **written examination** based on the scope of the above course modules
- Qualify (based on ISS-NUS criteria) for the entire certificate



Requirements of the Practice Module

Objective: To actualize a business analytics life-cycle project using material taught from the courses (SB, PA, DABP, TA, and RCS*)

- To enable participants to demonstrate their **proficiency** across all the skills that they have learned in the component courses and hence be certified as competent at the Certificate level.
- Students will undertake projects to tackle a **real world analytics problems** that will allow them to gain experience in the topics taught.
- Projects may be selected from within their own organisations or from other approved sources. These projects **will be assessed** by the ISS lecturers

* RCS is included only for the old BAP format



Group Project Size and Effort

- Recommended group size is **Four or Five**.
- Estimated sizing and complexity of project will require each member in the group to spend about **10 man days of effort**.
- Groups must demonstrate their ability to apply and practice the knowledge, techniques and skills they have learnt from the modular courses aforementioned.
- Every group member must **take turns to present** during the milestone presentation and be **fully conversant** with each other's work.



Overall Assessment

Assessment Component		Weightage
Project	Group (4-5 team member)	50%
Exam	Individual	50%

NUS requires you to attain at least a 40% to pass



Assessment Components & Schedule

Assessment Component (Deadline)	Weightage	Deliverables
GC Registration (10 th Jan 2021)	-	
Practice Module Briefing (13 th Jan 2021)	-	
Project Proposal Submission (11 th Feb 2021)	10%	Submission: Project proposal submission as per template. Approval is required.
Project Presentation 1 (15 th Mar 2021)	10%	Submission: Presentation slides (by 14 ^h Mar 2021)
Project Presentation 2 (10 th May 2021)	10%	Submission: Presentation slides (by 9 th May 2021)
Final Project Report (17 th May 2021) a) Group b) Learning Journal*	15% + 5%	Submission: a) Group: 1. Group Report, 2. Solution and Source Code b) Learning Journal: Individual
Written Examination (20 th May 2021)	50%	
Total	100%	

** Learning Journal is submitted by each individual covering their role, contributions, learnings from the project and its journey.*



Application Deadlines & Fees

SN	Description	Deadline
0	Submit Practice Module Application . Pay the Fees : \$214.00	10 Jan 2021, 5pm
1	Practice Module Briefing	13 Jan 2021, 6:30pm
2	Submit your project proposals for review and approval. <i>Note: You will be required to withdraw if your project is not approved.</i>	11 Feb 2021, 5pm



Withdrawal Schedule

Academic-related Activities	Important Timeline to Note
Withdrawal with full refund	29 th Jan 2021
Participants may withdraw from a module; a “W” Grade will be recorded for that module in NUS EduRec System/transcript	1 st Feb ~ 28 th Feb 2021* *email should arrive at iss-admissions@nus.edu.sg latest by 28 th Feb 2021, 11:59pm
Participants may withdraw from a module; a “F” Grade will be recorded for that module in NUS EduRec System/transcript	From 1 st March 2021 onwards



Project Proposal

- Submit to LumiNUS by **11 Feb 2021** for evaluation by ISS
 - ISS will revert with approval or comments
- The proposal should include the following content

Section	Content
Project Title	Title
Project Members	Names
Overview/ Company Sponsorship	Describe the project context and the proposed business value-add. Outline the company sponsor and the data provision.
Design	Describe in detail the project aspects that demonstrate (all) the individual course content
Scope of Work	The followings are the key aspects of the analytics project needs to focus: <ol style="list-style-type: none">1. Text analytics2. Statistical methods3. Predictive analytics techniques
Project Efforts and requirements	Generalise the project management estimated efforts and timeline. This is to ensure that you have thought about the approach and the implementation effort



Tips for the Proposal-writing

- Have a blend of technicality and business objectives
- Be as detailed as possible on the technicalities *in regards as to how it solves the problem(s)* at hand.
- We are not looking for in-depth technical or theoretical knowledge per se, but rather you display your understanding of the material taught in the classes and how it can be applied to the project.



Approval Criteria for the Group Project

- Business Value Add
 - To make the project interesting, groups must identify suitable business problem with multiple dimensions.
 - Project should value-add realistically of benefits to stakeholders
- Design of Project
 - Selecting appropriate stages in accordance to your project objectives, listed in the project requirements
- Demonstration of Course Content Understanding
 - Groups must demonstrate understanding and application of course content technique(s) for their projects to arrive at effective business solution and recommendation.

NUS-ISS reserves the final right to approve/ reject the proposal.



Projects Presentation and Report

- Each group would be allotted **20 minutes** to present the project. The presentation should be a good summary of the designed solutions. Please take time to rehearse and have a compelling presentation.
- The Presentation should include:
 - Clear articulation of the solution and the strategy in a structured manner
 - Problems and limitations encountered while developing the solution
 - Be prepared for Q&A anytime during the presentation.
 - Presentation is tentatively scheduled on the earlier mentioned schedule. Detailed schedule for teams will be announced nearer the dates. If your team has any preferences, do email the Course Manager early (Charlespang@nus.edu.sg).
- The Dates given earlier can be considered as fixed. Therefore, you must **cross out your calendar ASAP**.

