

Data Analytics Best Practices



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About NUS-ISS

We started in 1981 with an important national task of developing IT leaders and professionals. Since then, we have consistently supporting our national IT capability development agenda and recently expanded into areas of analytics & intelligent systems, digital leadership, and digital innovation & design.

Our Vision

Providing thought leadership in organisational innovation and business transformation

Our Mission

Developing infocomm and digital business leaders through education, applied research and consulting services



NUS-ISS is the first National Continuing Education and Training (CET) Institute for the:

- National Infocomm Competency Framework (NICF)

NUS-ISS is an appointed Programme Partner for:

- Service Excellence Competency Framework (SVCF)

Benefits to Singaporeans/PRs

- Acquire latest skills and knowledge supported by attractive funding
- Be eligible for up to 50 to 95% funding of accredited course fee
- SMEs will get to enjoy subsidies of up to 90% of the course fees when they sponsor their employees
- SkillsFuture Mid-Career Subsidy - Singaporeans aged 40 and above may enjoy up to 90% course fee subsidies
- Workfare Training Support Scheme (WTS) - Singaporeans aged 35 and above, earning a monthly income of not more than S\$1900, may enjoy subsidies of up to 95%

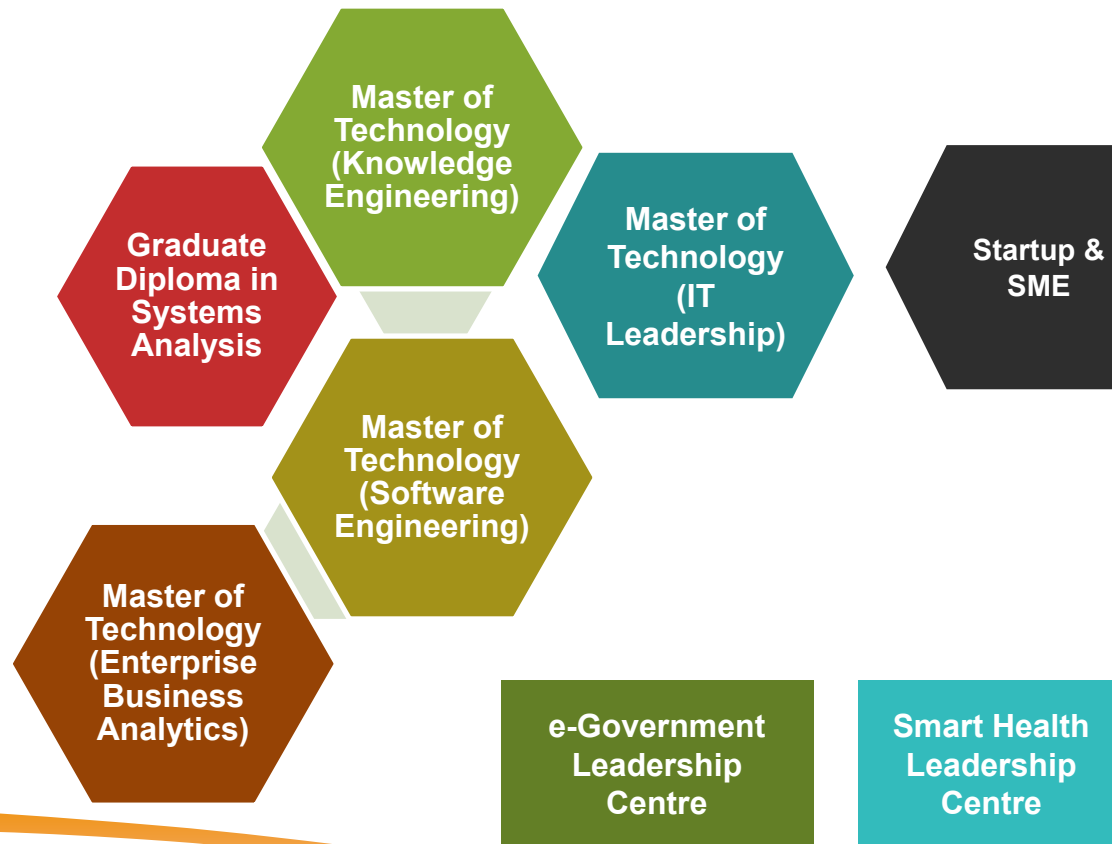
Our Practice-based Education

Research

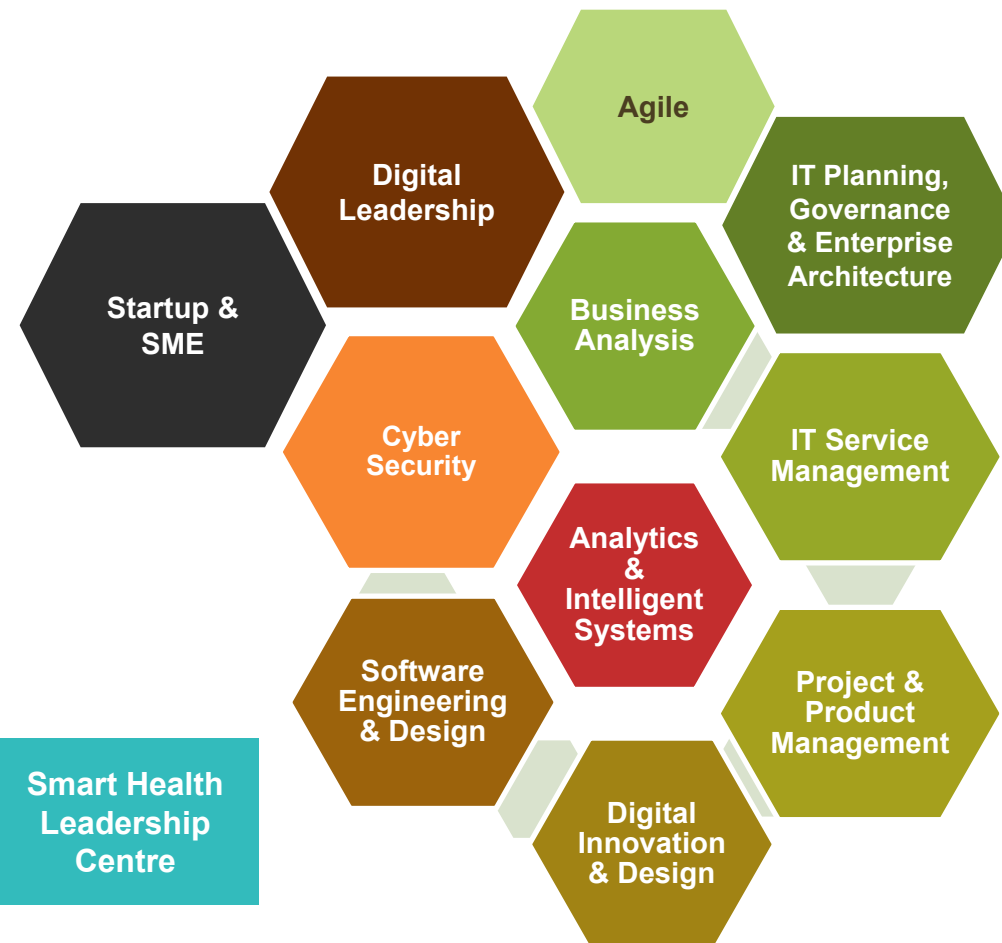
Consulting

Education

Graduate Programmes



Executive Education



Learner's Roles & Responsibilities

- Attend and complete all lectures, class exercises, workshops and assessments
- Complete the course feedback at the end of class to help us improve quality of course
- Complete the post course survey sent about three to six months after class attendance to help us continuously improve the application of learning to work
- Please contact course admin/instructor or email to isstraining@nus.edu.sg for any enquiry or feedback

Course Details

- **Duration** : 3 days (9:00 am to 5:00 pm)
- **This course includes** :
 - WSQ assessments (group and individual)
- **This course is aligned to these NICF competency units** :
 - Apply Data Visualisation (IT-BDA-402S-1)

Course Details

- **Course Pre-requisites/Assumed Knowledge & Skills:**

The course is an advanced one and assumes the participant can code in R.

- **Course Objectives/Learning Outcome:**

- Understand an end to end view of data analytics process.
- Structure a framework to align analytics objectives with business goals.
- Apply procedures and techniques for data sampling, data cleaning & audit.
- Apply procedures and techniques for data transformation, feature selection and generating datasets for model build & test, including data balancing.
- Propose and conduct statistical techniques for data exploration and modeling.
- Understand the methods and metrics involved in model testing and evaluation
- Understand the issues and methods involved in model deployment
- Advice on code of conduct to be adhered for prudent data management.

Assessment

- **Broad Schedule of Assessment:**

There will be 6 modules covered in the 3 days.

There are individual quiz, individual and group project as assessments during the course duration.

- **Passing Criteria :**

Individual Quiz – Pass the quiz.

Individual Assessment - Complete the individual project accurately.

Group Assessment - Complete the group project and make a substantive contribution to group project.

- **Assessment Method :** Individual Quiz & Project (Individual and Group).

Assessment

- The WSQ assessment assesses whether learner is competent (C) or Not Yet Competent (NYC) against criteria defined in the Competency Unit(s) covered in this training. If learner is assessed as competent, a **Statement of Attainment (SOA)** will be issued.
- Participants will receive email or SMS notification within three weeks from date of assessment on the issuance of the e-certificate.
- Participants can view / retrieve and download the e-certificate via SkillsConnect (SCN) at <https://www.skillsconnect.gov.sg> using **Adobe Reader software of at least version 10**. A Step-By-Step Guide for Trainee is available at www.skillsconnect.gov.sg

Appeal Process

Assessment and Exam Result Appeal process

- Submit appeal letter to course administrator within 2 weeks from receipt of the assessment/exam results
- You will receive the appeal result via email within 1 month from the date the appeal is received and processed
- If appeal is successful, results will be reissued
- The appeal decision is final. No further appeal will be entertained
- *For external examination appeal process, please directly contact the “certification governance bodies”*

Logistics

- Attendance
- Name verification
- Name plate
- Internet / Wi-fi access
- Mobile gadgets – Silent mode
 - Please do not leave your mobile devices (e.g. smartphone, power bank etc.) unattended when it is charging – i.e. please bring along with you or switch off the charging when stepping out of the classroom (e.g. for tea break or lunch break).
- Feedback
- Storage of items at the end of the day
- Tea Breaks & Lunch
 - Tea breaks and lunch provided at 2nd floor, Bisstro
- Washrooms

Fire Evacuation

DO's upon fire alarm trigger:

- Evacuate immediately
- Exit from the building using nearest exit door – look out for
- Do not panic but walk quickly and orderly down the staircase
- Proceed to assembly point

EXIT

sign overhead to locate the

DONT's upon fire alarm trigger:

- Do not bring any belongings with you (handbags, files, etc)
- Do not use the lift as it will be de-activated upon the fire alarm trigger
- Do not re-enter the building unless instructed otherwise by the Fire Safety Coordinator or the Civil Defence Officer in attendance

Assembly Point

★ Location : Carpark in front of I-Cube (I³)



Analytics & Intelligent Systems Courses

Statistical Analytics	Foundation	NICF- Statistics for Business 3 days	NICF- Statistics Bootcamp 5 days
Predictive Analytics	Intermediate	NICF- Customer Analytics 3 days	NICF- Health Analytics (SF) 3 days
	Advanced	NICF- Predictive Analytics - Insights of Trends and Irregularities 5 days	NICF- Text Analytics 3 days
		NICF- Advanced Customer Analytics 3 days	NICF- Data Analytics Process and Best Practice (SF) 3 days
Service & Social Media Analytics	Foundation	NICF- Web Analytics & SEO 3 days	
	Intermediate	NICF- Social Media Analytics 3 days	NICF- Service Analytics 3 days
Management & Leadership	Foundation	NICF- Managing Business Analytics Projects 3 days	NICF- Data Storytelling 3 days
		Data Driven Decision Making 1 day	
Engineering for Analytics	Intermediate	NICF- Big Data Engineering for Analytics 5 days	



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youtube.com/user/TheISSNUS/

Instructors



Nirmal Palaparthi



Prakash Sukhwai



Richard Tan

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