

# **Digital** Learning Guide

Digital Heroes to Advance Transformation





# As technology continues to evolve,

so must your business.

Digital transformation means adapting existing business practices to new digital solutions. Businesses pursue digital transformation to innovate rapidly, unlock new levels of revenue growth, reduce costs across the organisation and increase productivity.

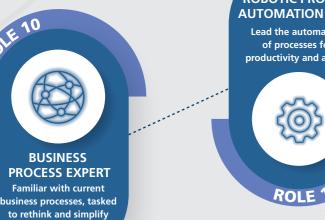
Everyone is a superhero in the digital transformation journey. This Digital Learning Guide aims to provide guidance on selection of ISCA's digital related courses to support you and your organisations in the digital transformation journey based on some of the roles you are taking on.





itay ahead of cyber trends understand the concepts, handy in the future





**ROBOTIC PROCESS AUTOMATION LEAD** productivity and agility



DIGITAL **CHAMPION** Digitally savvy, lead digital initiatives and help other ecutives to buy into he culture change



DATA STEWARD

and accuracy of data to support operations

**ENHANCING** 

DIGITAL AWARENESS

Aware of the digital and

cyber trends and concepts and consider the impact on the finance functions.

# POWERING-UP YOUR DATA **ROBUSTNESS**

**HOW TO** 

**ADVANCE** 

**YOUR DIGITAL** 

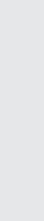
TRANSFORMATION

**JOURNEY** 



# **DEFENDING** AGAINST THREATS

With greater reliance on chnology, beware of incoming cyber threats! Gear up to lefense against data breaches and other cyber hazards.



# What is your — Digital Superhero role?

(Amongst the possible roles?)



**PROTECTOR** ompliance with PDPA

DATA

## **FORWARD** LOOKING: LEVERAGING **EMERGING TECHNOLOGIES**

Be bold and forward-looking. Advance and leverage new and emerging technologies to level up your finance functions and productivity

#### BUILDING **COMPETENCE &** FINANCE **RESILIENCE**

Explore other areas of digitalisation to build Finance's competencies in using technology Gain competitive advantage with modelling and data analytics to enrich business insights and strategies.





**ARCHITECT Employ data analytics** to transform data pieces and strategies





**MODEL BUILDER** Create hypothetical scenarios and apply

ocesses using relevan





#### **Big Data & Analytics**

#### DGT057v

#### **Analytics for Accountants and Auditors**

Understand the concepts and frameworks in using data analytics in your own business domains and learn to combine data analytics techniques with existing tools such as Excel or Google Sheets to enhance the efficiency and effectiveness of your day-to-day processes.

## DGT010 DGT010v Business Analytics for Strategic and Organizational Performance

Learn to understand conventional and advanced Business Analytics and why this is a critical success factor for businesses. Appreciate the types of data analytics, statistical methods and decisive insights in a business.

#### DGT065v

The World of Big Data at your Fingertips
This workshop is designed for finance and accounting professionals who are focused on managing the data in today's corporate landscape. Learn about managing humungous data sets and complexities with respect to various forms of data – Structured, Unstructured or Semi-structured.

#### E-Learning

#### DGT003i

**Data Analytics Made Easy** 

This course will cover key concepts and applications of analytics in business. In particular, it will cover three key considerations (namely business problem, data required, and analytics technique to be applied) to be taken into account when formulating and implementing business analytics project.

#### **Trends with Blockchain**

#### DGT016

Blockchain, Cryptoassets and ICO Due Diligence

This session provides middle-senior management the understanding of blockchain technology in the financial industry and beyond. Learn about the relationship between both bitcoin and altcoins in the context of blockchain and its implication for the industry.

Introduction to Blockchain Technology for Accounting and Finance Professionals

Through multiple hands-on activities, this course covers multiple real world examples and contrasts between specific blockchain implementations, such as Bitcoin, Ethereum and Stellar, with the goal of demystifying the concept of blockchain technology, providing a relevant and applicable understanding.

Where is the future of Central Bank Digital Currency (CBDC) heading?
Future of Currency: Bitcoin & other digital coins

A sneak preview into the future of Central Bank Digital Currency (CBDC), future of Digital Currency: Bitcoin and other digital coins. This course is designed for those interested in investing in crypto currencies to gain more knowledge of digital assets.



#### DGT069v ■

The Disruption of Blockchain: Smart Contracts

Understand the mechanics behind blockchain technology that drives smart contracts. Find out why businesses, including financial institutions and governments, are increasingly turning to them as a faster, cheaper, and more secure way to execute transactions efficiently and innovate solutions.

#### Impact of Fintech

#### DGT063v

WealthTech, Neo Banks: Where is Digital Wealth Management heading, Accounting Opportunities and Risk

This course covers an overview of WealthTech and the opportunities available for accounting experts in the world of FinTech.

#### **Insights on Emerging Technologies**

Artificial Intelligence (AI) and the Accountant

Designed to put an accountant up-to-date on AI as a technology that can be applied to the profession. This enables the mindset to be geared towards preparing for the inevitable emergence of AI processes.

#### DGT056v

Facts and Fictions: Navigating the Waves of Al

Understand the types of application to problems that Al technology can solve today and in the future. Learn the fundamentals of how Al works and its limitations, importance of data and effects on AI performance.

DGT041 DGT041v ■■ Understanding and Managing Emerging Technologies Managers today participate in enterprise transformation projects. This course aims to introduce data analytics, automation, blockchain and cloud storage to allow you to evaluate the implementation of these common new technologies in your workplace.

#### DGT068v

**Digital Transformation and Innovation** 

Stay agile and resilient, Innovate to improve. This course focuses on how to seize opportunities and tap on changing technologies to transform, as well as explore innovative ways to build new market opportunities.





#### **Excel with Essential Functions**

#### **AER2.0** ■

#### Introduction to Excel for Reporting

This course aims to enhance ability to apply advanced excel functions. Learn the fundamentals of transforming basic formulas to interactive formulas to support dynamic and sustainable reports. This course serves as a primer for the Business Analytics & Reporting (BAR) course.

#### IT008C IT008Cv ■■ Essential Excel Spreadsheet Skills

Having clear and accurate data is crucial to making meaningful decisions and forecasting. This course is directed at finance professionals who use Excel in their everyday job to improve decision-making and productivity.

#### IT080v ■

# **Exploring Excel Features for Efficient Data Analysis and Reporting**

This workshop will equip the participants with knowledge and skills to improve their experience in using the data analysis and reporting tools of Microsoft Excel 2016 (and later versions). The new features let you get away from massive walls of numbers, allow you to draw a clearer picture of your data, provide you with tools to create reports faster and enable you to make more effective decisions.

#### IT082v ■

#### Time Saving Excel Tips and Tricks for Admin /Finance/ HR Professionals

This workshop focuses on the technical Excel functions required in everyday work scenarios and equips you with the essential skills to increase your productivity in your job.

# Pivot Table, Charting & Dashboard for Data Organisation & Visualisation

#### IT021Cv ■

#### **Financial Data Management with Pivot Tables**

Learn how to use Excel pivot tables more efficiently and effectively. This workshop will go beyond the basics of Pivot Tables for data analysis and reporting and is suitable for participants who have already been using or have used Pivot Tables in their organisation.

#### IT027Cv ■

#### Interactive Dashboard: Designing Visually Appealing Reports

Learn how to create dashboards which are visually appealing, interactive and user-friendly to enhance decision making process through building of powerful charts.





# IT031C IT031Cv ■ Creating Professional PivotTable Driven Reports (Basic to Intermediate Level)

This workshop will equip you with the essential skills to create dynamic PivotTable and PivotChart reports from Excel Table, use the Recommended PivotTables tool, change the report formats, sort and group PivotTable fields, filter pivot data with slicer and timeline, show report filter pages, change report functions, create PivotTable from external data, create custom formulas, add Sparklines, data bars and icon sets to PivotTable report as well as create a slicer-driven report to control multiple PivotCharts.

#### IT075v

#### Advanced Charting & Visual for Management Reporting

Learn how to use Excel to create powerful charts. Understand, prepare & analyze data using appropriate chart types and creatively integrate excel functions to create dynamic charts. You will also learn useful tips and tricks to build charts efficiently.

#### **Data Governance**

#### DGT071v

#### **Data Governance: Managing your Valuable Asset** Data and databases play an essential role in the

organisations. This course is to help participants to understand and implement data governance that includes data design, data access, data collection, data classification, data processing, data privacy and confidentiality, data security, data sharing, and data regulation. Case studies, including hands-on application with online resources, are used to enhance participants' understanding on the database management and data protection issues.

#### **Data Extraction with SQL**

#### IT022C

**Data Management & Analysis in Excel Using SQL** In this 2-day course, you will learn how to work with Excel and external databases such as MS-Access and learn SQL to enhance data analysis, synthesis and reporting in Excel.



## Cyber Threats & Security: **Considerations for Risk Management**



Cyber Forensics and Cyber Security **Essential Concepts and Case Studies Tutorials** 

This blended learning and experiential programme provides an understanding and application of the different aspects of cyber forensics and cybersecurity knowledge and skills.

#### DGT018 DGT018v ■■ Cybersecurity Risk - What it means to Auditors

This programme is for auditors to have a basic understanding of the different cyber security risks and best practices. It equips auditors with the ability to perform high level assessment of their client's cyber security maturity to handle any security event.

#### DGT048v Cybersecurity Literacy

Learn to improve your cybersecurity knowledge and become conversationally fluent in discussing cyber-security initiatives and potential security risks.

#### DGT050v

Steps to Develop an Effective Cyber Security Strategy

This training outlines how organisations of all sizes can identify, treat/manage and transfer cyber risks, in alignment with your organization's risk appetite and financial expectations. Learn practical operational steps and processes to develop a cyber-security strategy.

#### E171v **Digital Fraud**

Learn the impact of emerging technologies on fraud, how computers are used in occupational fraud through data manipulation and destruction, and gain insights in computer and Internet fraud investigations and digital forensics.

#### **ISCA ISRM Certificate**

#### IT086v

**Essentials of Information Systems Risk and Controls** (ISRM Part 1)

The training programme will help to upskill the industry and increase the capabilities of service providers in the area of information systems risk management.

Information Systems Risk Management (ISRM Part 2)

Gain essential knowledge into IS risk management. Key topics include Enterprise IT Architecture, Network and Information Security Management, IT Service Management, IS Risk Management Framework - covering Risk Identification, Assessment, Treatment, Reporting and Monitoring.





#### DGT033

**Personal Data Ethics and Management** 

Learn to better understand the challenges and ethical issues on the collection, usage, retention and protection of personal data within the company. You will learn to establish the code of conduct and processes to handle personal data breaches.

#### DGT034

Personal Data Protection Audit & Compliance

Learn how to establish proper internal audit processes to comply to PDPA requirements on the handling and protecting personal data within the company as well as what steps to be taken to ensure effective compliance.

#### LS040v

**General Data Protection Regulation (GDPR) Compliance: Overcoming Potential Issues and** Challenges

This course provides a good overview of the GDPR and describes practical applications for companies to be compliant. Learn about potential challenges and practical ways to overcome them.

#### LS044

**Updates to Personal Data Protection (Amendment)** Act 2020

The course provides an update on the new Personal Data Protection (Amendment) Act 2020, Fulfill compliance to all the amendments and additions of PDPA DPOs to update your company PDPA Policies & Procedures.

#### **ISCA PDPA Compliance Certificate**

#### WD013

WSQ Fundamentals of the Personal Data Protection Act (2020)

WSQ-accredited course with SkillsFuture Credit, SSG funding.

This course equips DPO or anyone whose responsibilities involve data protection with practical knowledge and skills in developing appropriate internal processes to achieve full compliance of PDPA. Learn about implementing the essential processes to comply with the Act.

#### LS039

PDPA - Risks, Compliance and Ethics

The course provides learners with a good overview and understanding of the Personal Data Protection Act (PDPA) and how it may be applied to the organisations for compliance. These include key legislative and regulatory requirements of PDPA and how learners can help ensure compliance and alignment with PDPA.







**ARCHITECT** 

**Employ data analytics** 

to transform data pieces into business insights

and strategies

### STORYTELLER DUO Effective in reporting, communicating financial updates and insights with data visualisation and storytelling





#### **FINANCIAL MODEL BUILDER**

Create hypothetical scenarios and apply multiple assumptions to support decision-making of capital decisions

#### **Application of Data Analytics** & Visualisation for **Business Decisions**

#### DGT042v **Managing Business Performance** with Business Analytics

Learn to embed data analytics into your core strategy through streamlining of internal business processes, unfolding consumer trends, monitoring emerging risks and driving analytical transformations to gain competitive edge and stay at the forefront of digital disruption.

#### DGT039 DGT039v ■■ A Hands-on Approach towards Data Analytics (for Accountants and Analysts)

This course focuses on building foundational knowledge to gain an appreciation of the entire data analytics process and the capabilities/limitations of data analytics using Alteryx and Tableau. You will learn useful technical skills to widen your horizon and understanding of the new digital economy and workplace.

#### IT088v ■

#### Work with Data & Generate Data Driven Insights using Advanced Data Analytics

Hands-on with large data sets and complex calculations whilst understanding data statistically in class. Techniques in Data Mining, Predictive Analytics and Prescriptive Analytics are presented to enhance understanding of data from an analytical perspective and ability to make informed decisions. Also covers tips and tricks of developing complex analytical dashboards and use of Business Intelligence and its tools in the

#### **ISCA BAR Certificate Programme**

#### BAR2.0 BAR 2.1 **Business Analytics and Reporting**

Learn how to improve your productivity in reporting and analytical work by combining the various tools and features of Microsoft Excel to fulfill your monthly financial reporting, financial analysis and budgeting tasks in BAR2.0. With this, you will learn to deliver high quality and timely reports and dashboards to support organizational reporting for more effective organizational decision making.

# **Business Analytics and Reporting with Power BI**

Opt for additional 1-day training with BAR 2.1 to combine the various tools and features of Power BI to publish and share monthly financial reports.

#### Analytics x Tableau

#### DGT036 DGT036v ■■

**Enable Strategic Business Decisions via** Scientific Business Analytics and Data Visualization

This course aims to provide an introductory 101 understanding on how scientific use of data analysis and data visualisation could lead to improved decision making and problem solving.

#### DGT044v

**Data Dashboards for Better Decision-Making** 

Learn how to make effective dashboards and take your decision making to the next level. For those comfortable working with datasets and like to learn more about creating effective dashboards to visualise data.

#### WD012:WSQ ■

Let's Work on Easy-to-Understand Reports! Effective Data Visualisation and Communication

WSQ-accredited course with SkillsFuture Credit, SSG funding.

Learn the skills and techniques to design and create effective and aesthetically pleasing data visualisations using Tableau for reporting and analysis purposes. Also covers the art of creating interactive dashboards and practical knowledge to improve your communication and presentation skills, and obtain buy-in from stakeholders.

#### Analytics x Power BI

#### IT078 IT078v ■■ **Enhancing your Business Analytics** Capability with Power BI

Data Visualisation through Power BI

Improve your productivity in reporting and analytical work by combining the various tools and features of Microsoft Power BI with your Excel knowledge to fulfill your monthly financial reporting, financial analysis and budgeting tasks for more effective organisational decision making.

#### IT079v ■ Insightful Decisions using Informative Dashboards -

Learn how to work with huge data sets and multiple assignments. This course will enable you to learn important features of Power BI to prepare and present insightful reports for management using complex calculations, presentations and visualisation techniques.

#### DGT059

#### **Digital Transformation using Power BI**

Learn techniques and new ways of understanding and analyzing data. You can look forward to creating and customizing dynamic dashboard with short setup time to answer problem statements and provide insights through visualisation.



# Hands-on with Excel for Financial Modelling, Simulation & Analysis

#### IT023Cv

Business Analysis and Planning: Using Excel What-If Analysis

This course focuses on Excel What-if analysis tools and allows you to explore different scenarios without changing the values in your worksheets, develop interactive models for decision making, perform simulations, sensitivity and scenario for project / investment evaluation and resource planning and allocation.

#### IT037v ■

Financial Modelling & Analysis

Learn how to build effective Financial Model quickly and effectively to meet business needs, prepare What-if analysis to allow better management decision making, understand the dos and don'ts in Building a Financial Model using Excel and more.

#### IT038v

**Practical Financial Modeling & Analysis with Excel** 

An intense, interactive one-day workshop illustrating the professional way to construct and use financial models on spreadsheets using modern financial modeling techniques and advanced Excel financial functions and tools.

### IT069C IT069Cv ■■

**Excel Budgeting Techniques** 

This programme is dedicated to solving the problems managers face when preparing budgets and forecasts and provides accountants with practical guidance on how to prepare more accurate budgets and forecasts with less time and effort.

#### IT077v

**Building Interactive Budget Tracking and Variance Analysis Model using Excel** 

Learn to build effective budget model quickly and systematically to meet business needs efficiently and prepare reports using What-if analysis to support better management decision making.

#### IT084v

Financial Modelling & Analysis (Part II)

Equip yourself with the necessary Excel skills and finance leadership mindset in building 6 different financial models that are commonly required in most businesses. This course is an extension of IT037v: Financial Modelling & Analysis.

#### E-Learning

#### DGT001i

# Financial Modelling to Support Business Decision-Making

This e-learning course will cover the concepts and application of financial models and illustrate how to build a sample model using the financial modelling tools available within Excel.

#### DGT002i

**Financial Modelling** 

This e-learning course will guide you through the process of building and integrating a three-statement financial model to project the financials of a business and apply in the context of valuing the enterprise. You will learn the best practices of financial modelling and improve spreadsheet productivity.

#### Let's Start Coding with Macros & VBA

#### IT030C ■

#### **Excel Macro Fundamentals**

Learn how to accomplish routine tasks with VBA Macros in Excel. This course includes extensive explanations and examples of how these areas could be applied to real-world situations in Management Reporting and typical Accounting/Finance tasks.

#### IT036v ■

# Excel Macros 1: An Introduction to Excel Macros for Accounting and Finance Professionals

This one-day training programme is designed as an introduction to understanding the role of Macros in automating tasks within Microsoft Excel.

#### IT036Bv ■

# Excel Macros 2: Mastering Excel Objects with VBA for Effective Spreadsheet Automation

This course elaborates the 3 components of Macros: knowledge of Excel features, Objects and VBA. It covers data manipulation, developing dynamic Macros with VBA, managing data with Worksheet and Workbook Objects and code debugging.

#### IT036Cv ■

#### Excel Macros 1 & 2: Excel Macros Workshop

This programme is an intensive Macros programming course, covering introduction to advanced Excel Macros. Participants must have basic to intermediate level of Excel experience. Learn the crucial aspects of writing Macros for dynamic spreadsheet data processing.

#### IT083v ■

# **Enhancing Financial Model with VBA made easy** for Accountants

Learn how to further automate a Financial Model with Macros & VBA in MS Excel and create VBA template that can consolidate financial data from various data sources or system with a click of button.

#### **Expand Capability with Power Pivot**

# IT081 IT081v

# Leveraging Power Pivot and Power Query in Microsoft Excel

The use of Power Query and Power Pivot enables you to perform powerful data analysis, create interactive reports and make timely business decisions. This class focuses on Excel Data Models and Power Pivot to give you additional flexibility in reporting not available in regular pivot tables. You should have an adequate knowledge in PivotTable and PivotChart in order to benefit most from the course.



# FORWARD LOOKING: LEVERAGING EMERGING TECHNOLOGIES

BUSINESS
PROCESS EXPERT
Familiar with current
business processes, tasked
to rethink and simplify
processes using relevant
technologies





Click on Course Code to find out

#### **Enhance Efficiency with RPA**

#### DGT040 ■

#### **Robotic Process Automation (RPA) for Auditors**

Course is supported by ESG with fee subsidy. Aims to equip auditors with the skills to easily create useful RPA scripts to automate the audit, accounting, tax and corporate secretarial processes, without any coding or programming knowledge.

#### DGT047Bv ■

#### **Robotics Process Automation**

This course is intended to introduce RPA through a series of hands-on activities. You will create your own RPA projects for real-world tasks to gain insight to the adoption process and potential of the technology.

#### DGT049 ■

# Robotic Process Automation (RPA) for Accountants and Finance Professionals

This course aims to equip you with the skills to easily create simple and useful RPA scripts to identify such processes and implement automation on accounting and finance processes.

#### **Problem Solving with Machine Learning**

#### DGT047Av

#### **Artificial Intelligence and Machine Learning**

Get an introduction to Artificial Intelligence and Machine Learning, with an eye towards utilizing this knowledge to better evaluate the potential of Robotic Process Automation to optimise organisational efficiency.

#### DGT058v

#### **Applied Machine Learning for Accountants**

Understand Machine Learning algorithms (i.e., regression, classification, clustering, and text analysis) and how these algorithms can be applied in the accounting domain. This course includes hands-on experience with Microsoft Azure Machine Learning Studio to apply on proper machine learning models.

#### DGT070v ■

# Applied Machine Learning with Python for Accountants

The course starts with machine learning concepts, introduces common algorithms and their applications, followed by hands-on experience using Python to apply proper machine learning models on the accounting domain.

#### **RPA x Machine Learning**

#### DGT047Cv

# Artificial Intelligence, Machine Learning, and Robotic Process Automation

Learn about Artificial Intelligence, Machine Learning, and Robotic Process Automation. Multiple hands-on activities will be used to highlight different machine learning applications, such as computer vision and neural networks.

#### **Get Started with Programming: Python & R**

#### IT090v ■

**Statistical Analysis - A Primer with Excel, R and Python**Learn the basics of Excel/VBA, R and Python to empower the participant with a strong foundation in the application of statistics working through the exercises to provide ideas and solutions to workplace problems. An entry level foundational course - prior knowledge of Excel/VBA, R and Python, although advantageous, is not necessary.

#### DGT043 ■

#### **Basic Python for Financial Modelling**

Designed to provide finance professionals with a straightforward introduction to the basics of Python for analytics and financial modelling purposes, this course will prepare you to pull insights from financial data for decision analysis.

#### DGT053v ■

#### **Get Started with Fundamentals of Python for Finance**

This course is intended for Finance professionals who want to learn the fundamentals of Python in a day. Participants will learn the fundamentals of Python as they are guided through a series of hands-on coding exercises related to financial analysis.

#### IT072 IT072v ■■

# Introduction to Python for Accounting and Finance Professionals

Learn how to use Python basics as well as Pandas and plotting libraries to enhance your data analysis ability.

#### IT076v

#### Introduction to R for Excel Users

R (similar to Python) is a programming language designed for processing, analysing and visualising data. Understand and apply simple data manipulations from an Excel application perspective: importing, manipulating, transforming, combining and summarizing data for business analysis and reporting with R programming.

#### IT087 IT087v ■■

# Python: Its Applications and its Implementation for Accounting and Finance Professionals

Designed by accountant. Get started with Python basics and some applications in accounting and finance context. Enhance your coding skills by incorporating Python resources, such as Pandas libraries and Xlwings, to perform data analysis and create dashboards faster and in an efficient way.



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For more information of ISCA Digital Learning Guide

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