

S/4HANA Academy

Technical User Course Handbook



UKISUG Academy

Purpose, Vision, Mission & Value

Driving success for the SAP Community

Purpose

To provide the next generation of talent and enable knowledge and skills transfer for the SAP community.

Vision

Our vision is to address the skills gap with education for the SAP community.

Mission

Our mission is to enable the UK & Ireland SAP User Group community the ability to upskill, re-skill and develop the next generation of talent.

Value

Our value is to:

- Provide UKISUG members with a one stop shop to upskill and re-skill, gaining SAP and industry certification, knowledge and expertise
- Address the current SAP skills shortage in the marketplace for both SAP business and technical consultants
- Gain CPDs and university qualifications

Overview of

S/4HANA Academy

The S/4HANA Academy aims to identify the user learning journeys, associated content, delivery methods and durations, with a view to:

- **1. Align the training material:** Training materials are provided in silos and are segmented then co-ordinated and aligned based on customers personas and needs.
- **2. Fill in the gap in the existing content:** The research has identified a lack of training for some of the topic areas, identified personas and through systematic literature review by the work group.
- 3. Provide in-depth and hands-on experiences of the training topic areas: The training materials are delivered at a conceptual level and in a theoretical form in most cases by the training providers, generally in PowerPoint and video format, with pre-defined case studies that contain in-depth knowledge for specific customer challenges.

Course

Structure & Delivery

Teaching will be primarily delivered live and in person, with Zoom links for any recorded material.

The course has modules and each module learning session is outlined on the module descriptions and will have the following elements:

- Pre-lecture learning activity (student managed/self-directed or lecturer-directed learning)
- Lecture materials and activities covering subject specialities including individual or group activities
- Support material on the module topic area such as case studies, videos or industry based white papers and academic literature
- Students can access the course and module material and learning sessions through the dedicated UKISUG Academy Virtual Learning Environment (VLE) platform (details will be provided upon registration)





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S/4HANA Academy Technical User Course:

Module Definitions

The S/4HANA academy technical user course has five modules, each module description is provided as part of this document. The five modules are:

Module 1: S/4HANA Overview

Module 2: S/4HANA Solution Architecture

Module 3: S/4HANA Network & Security

Module 4: S/4HANA Application Development

Module 5: S/4HANA Analytics and Data Management



S/4HANA Academy Technical User

Learning Journey Personas

The below diagram outlines the learning journeys of the organisational personas studying the S/4HANA technical course:

S/4 HANA Academy: Technical End-User Course Learning Journey







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Module 1:

S/4HANA Overview Module Description

Academy	C//LIANIA Acadomy
Academy	S/4HANA Academy
Course title	Technical User Course
Module title	S/4HANA Overview
Delivery	Duration:1 DayFace-to-Face:1 DayOnline:0 DaySelf-Study:28 Hours
Suitable for	No S/4HANA knowledge or basic background on S/4HANA
Level	CPD
Credit rating	Certificate of Professional Development
Module Lead / Tutor	Michael Longden
Module Developer Persona	This module has been developed by an S/4HANA Academy technical user, business user or consultants, who has at least managed and completed one S/4HANA implementation cycle. They will have been involved in project feasibility and transformation and will bring practical experience to the module.
Brief content	Provides an overview of S/4HANA implementations based on various scenarios.
Aims	This module aims to provide an overview of S/4HANA technical implementations based on various scenarios: Introducing the best practices, industry standards for system readiness, minimising of
	 Providing overview of transformation methods and techniques for engineering system landscape based on As-Is and To-Be scenarios for S/4HANA implementation
	 Introducing business change management for S/4HANA implementation, its impact on the end-user and transition from technical to business and its alignments
Rationale	The module is designed to provide knowledge and skills on S/4HANA implementation, addressing the current skills gap for UKISUG members.
Learning outcomes	 On completion of the module, the student should be able to: Understand the various S/4HANA implementation scenarios including best practices, standardisation, system readiness and code minimisation Understand and discuss the methods and techniques for the transformation to S/4HANA Identify and discuss business change management implications to the organisation and understand its impact on end-users and the translation of processes from technical to business
Learning and Teaching Strategy	The module will be taught using a combination of lectures, tutorial sessions, case studies and practical sessions.

Module description

Part 1 - S/4HANA Overview:

Understanding various scenarios

Understanding the various S/4HANA development and implementation scenarios, such as new implementation, conversion and a hybrid approach to S/4HANA.

Standardisation

Introducing the standardisation of technical code based on the business processes, looking at methods and techniques of best practices for standardisation. This will also take into consideration the S/4HANA on-premise and cloud private edition implementations and its differences.

Minimisation of Code Changes

Introducing methods and techniques to minimise code change when going through transformation and transition into an S/4HANA implementation.

Systems Readiness

Introduces best practices on organisation data cleansing and maintenance based on different types of implementations to enable data transition and transformation. Depending on what S/4 version you are moving to, they will have suitable fore version/patching requirements. These need to be considered to ensure you have a path forward for your upgrade.

Licencing Overview

Provide an overview of licence options based on the various ${\sf S/4HANA}$ implementation scenarios.

Part 2 - Transformation Overview

As-Is and To-Be changes and impact

The content will focus on providing knowledge and skills to transform business processes and technical systems from the current status (As-Is) to the future status (To-Be) and the required changes and its impact on the business.

Systems Engineering of the Landscape

The content will provide knowledge and skills on engineering architecture landscape for the organisation systems based on chosen scenario, considering the technical and business architecture landscape options and capabilities. This will also take into consideration the S/4HANA on-premise and cloud private edition implementations and its differences.

Part 3 – Business Change Management

Understanding impact on end-users

The content will provide knowledge and skills on understanding and minimising the impact of S/4HANA implementation on the business departments' end-users, for example the finance department or HR as part of the overall business change management, including business process changes that impact end-user's functional activities within the company departments.

Translation process from technical to business

The content will provide knowledge and skills on translation of technical and business process from existing ERP system to S/4HANA based on various implementation scenarios. This will also take into consideration the S/4HANA on-premise and cloud private edition implementations and their differences.

Learning Resources

Reading List

Material is made available over the VLE from UKISUG and SAP

Additional & Self Study Reading List

User Group existing documents, case studies, presentations and webinars

Software & Hardware Resources

Not Required

IT Resources





Module 2:

Solution Architecture Module Description

Academy	S/4HANA Academy
Course title	Technical User Course
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Module title	S/4HANA Solution Architecture
Delivery	Duration:2 DaysFace-to-Face:2 DaysOnline:0 DaySelf-Study:42 Hours
Suitable for	Senior Level & Solution Architect, Functional / Technical User
Level	CPD
Credit rating	Certificate of Professional Development
Module Lead / Tutor	Michael Longden
Module Developer Persona	This module has been developed by an experienced S/4HANA technical consultant with experience in solution and systems architecture and who has been involved in at least one solution architecture for S/4HANA implementation. They will bring practical experience to the module.
Brief content	Provides knowledge and skills on design and development of database architecture, application architecture and solution monitoring for S/4HANA implementation.
Aims	Knowledge and skills on design and development of database architecture, application architecture and solution monitoring for different S/4HANA implementations, considering different types of Cloud offerings including the SAP Cloud Service Models of:
	 laaS (infrastructure-as-a-service)
	 PaaS (platform-as-a-service)
	SaaS (software-as-a-service)
Rationale	The module is designed to provide knowledge and skills on solution architecture for S/4HANA implementations based on various scenarios, addressing the current skills gap for UKISUG members.
Learning outcomes	On completion of the module, the student should be able to:
	 Identify and apply the database architecture for various scenarios of S/4HANA implementation
	 Identify and apply the application architecture for various scenarios of S/4HANA implementation
	3. Identify and apply the solution monitoring approaches and methods for various scenarios of S/4HANA implementation
Learning and Teaching Strategy	The module will be taught using a combination of lectures, tutorial sessions, case studies and practical sessions.

Module description

Part 1 - Database Architecture

- On-premise vs Cloud
- HANA Databases HANA vs ECC
- Database Optimisation
- Linux vs Windows

Part 2 - Application Architecture

- Technical Application Landscape Architecture
- Systems Integration
- Embedded vs Separate

Part 3 - Business Change Management

- Monitoring Overview
- Hardware Monitoring
- Database Monitoring
- Application Monitoring

Learning Resources

Reading List

Material is made available over the VLE from UKISUG and SAP

Additional & Self Study Reading List

User Group existing documents, case studies, presentations and webinars

Software & Hardware Resources

Not Required

IT Resources





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Module 3:

Networks & Security Module Description

Academy	S/4HANA Academy
Course title	S/4HANA Technical Course
Module title	Networks & Security
Delivery	Duration:2 DaysFace-to-Face:2 DaysOnline:0 DaySelf-Study:42 Hours
Suitable for	Technical User, Network Engineer, Security Engineer & Basis
Level	CPD
Credit rating	Certificate of Professional Development
Module Lead / Tutor	Michael Healey, Chris Haigh
Module Developer Persona	This module has been developed by an experienced S/4HANA technical consultant as a network engineer with expertise in networking and security and has been previously involved in various S/4HANA implementations. They will bring practical experience to the module.
Brief content	Provides knowledge and skills on network and security configuration for S/4HANA implementation for cloud and on-premise.
Aims	The module aims to provide knowledge and skills on network and security configuration for S/4HANA implementation.
Rationale	The module is designed to provide knowledge and skills on network and security configuration for S/4HANA implementation.
Learning outcomes	 On completion of the module, the student should be able to: Identify and understand the network configuration for S/4HANA implementation including hardware and network setup, Network VLANs and Linux Operating Systems migration Identify and understand the security configuration for S/4HANA implementation including firewall configuration, access monitoring, external communication and user authentication
Learning and Teaching Strategy	The module will be taught using a combination of lectures, tutorial sessions, case studies and practical sessions.

Module description

Part 1 - Overview

- Overview of Development
- Architecture Consideration
- Fiori Specific Security
- Roles & Responsibility

Part 2 - Network Configuration

- Hardware Setup
- Network Setup
- Network VLANs
- Linux Operating Systems

Part 3 - Security Configuration

- User Authentication
- Firewall Configuration
- Access Monitoring
- External Communication

Part 4 - Cloud vs On-premise

- Pros & Cons of Cloud vs On-Prem S/4HANA
- Integration: Internal & External

Learning Resources

Reading List

Material is made available over the VLE from UKISUG and SAP

Additional & Self Study Reading List

User Group existing documents, case studies, presentations and webinars

Software & Hardware Resources

Access to S/4 HANA Platform

IT Resources





Module 4:

Application Development Module Description

Academy	S/4HANA Academy
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Course title	S/4HANA Technical Course
Module title	Application Development
Delivery	Duration:3 DaysFace-to-Face:3 DaysOnline:0 DaySelf-Study:63 Hours
Suitable for	Day 1 - Business Users Day 2 & 3 - Technical Users, Developers & Basis Users
Level	CPD
Credit rating	Certificate of Professional Development
Module Lead / Tutor	TBC
Module Developer Persona	This module has been developed by an experienced S/4HANA technical consultant specialising in application development and Basis work and who has previously been involved in various S/4HANA implementations. They will bring practical experience to the module.
Brief content	Provides knowledge and skills on application development for S/4HANA implementation based on various scenarios.
Aims	The module aims to provide knowledge and skills on application development for S/4HANA implementation, considering organisation applications, Fiori development and SAP Business Technology Platform.
Rationale	The module is designed to provide knowledge and skills on application development with the aim to upskill and re-skill the technical team of the organisation, addressing the current skills gap for UKISUG members.
Learning outcomes	On completion of the module, the student should be able to:
	 Understand and apply skills in application development for S/4HANA implementation including ABAP development, eclipse modelling, functional development and application optimisation.
	Understand and apply skills in Fiori and UI development for S/4HANA implementation including application configuration and ODATA services.
	3. Explore and understand the SAP Business Technical Platform (BTP) as part of the S/4HANA implementation for current and future developments.
Learning and Teaching Strategy	The module will be taught using a combination of lectures, tutorial sessions, case study and practical sessions.

Module description

Part 1 - Overview

- Overview of BTP
- Overview of Extensibility Options
- Modern Application Development Artefacts
- Planning for Adoption
- Staying up-to-date, continuous learning

Part 2 - Application Development

- ABAP Development
- Eclipse Development
- Functional Development
- Application Development

Part 3 - Fiori Development

- Fiori UI Overview
- Application Configuration
- ODATA Services

Part 4 - Business Technology Platform (BTP) Overview

Overview of Business Technology Platform

Learning Resources

Reading List

Material is made available over the VLE from UKISUG and SAP

Additional & Self Study Reading List

User Group existing documents, case studies, presentations and webinars

Software & Hardware Resources

Access to S/4 HANA Platform

IT Resources





Module 5:

SAP Analytics & Data Management Module Description

Academy	S/4HANA Academy
Course title	S/4HANA Technical Course
Module title	SAP Analytics & Data Management
Delivery	Duration:2 DaysFace-to-Face:2 DaysOnline:0 DaySelf-Study:42 Hours
Suitable for	Technical User, Data Management and Analytics, Developer & Basis
Level	CPD
Credit rating	Certificate of Professional Development
Module Lead / Tutor	Florian Boersting, Joga Kang, Richard Thomas
Module Developer Persona	This module has been developed by an experienced S/4HANA technical consultant specialising in SAP analytics and data management and has been previously involved in various S/4HANA implementations. They will bring practical experience to the module.
Brief content	Provides knowledge and skills on SAP analytics and data management for S/4HANA based on various scenarios.
Aims	The module aims to provide knowledge and skills on SAP analytics and data management for S/4HANA implementation, considering various scenarios.
Rationale	The module is designed to provide knowledge and skills on SAP analytics and data management for S/4HANA.
Learning outcomes	On completion of the module, the student should be able to:
	 Understand and apply skills in database management including table structure and business partner model configuration for the S/4HANA implementation
	2. Understand and identify the impact to existing transaction and reports for S/4HANA implementation
	3. Understand Embedded Analytics for S/4HANA implementation based on business requirements
	4. Create reports and dashboards for S/4HANA implementation based on business needs
Learning and Teaching Strategy	The module will be taught using a combination of lectures, tutorial sessions, case studies and practical sessions.

Module description

Part 1 - Data Management

- Table Structure Changes
- Business Partner Model Configuration
- Impact on existing transactions and reports

Part 2 - Analytics

- Overview of Embedded Analytics
- Create Reports and Dashboards

Learning Resources

Reading List

Material is made available over the VLE from UKISUG and SAP

Additional & Self Study Reading List

User Group existing documents, case studies, presentations and webinars

Software & Hardware Resources

Access to S/4 HANA Platform

IT Resources







