

# SAP ONLINE COURSES EXCLUSIVELY FOR STUDENTS & APPRENTICES

- » **100 % ONLINE & FLEXIBLE**
- » **TUTOR SUPPORT**
- » **UNIVERSITY CERTIFICATE**
- » **SAP CONSULTANT CERTIFICATE**

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## MOTIVATION

In order to start a successful career after many years at school and university, SAP-skills have become an indispensable factor. Understanding SAP software and the ability to work with it is vital in many areas of the job market. For many positions today such skills are mandatory. When this is not the case, applicants can still be sure to enhance their chances to be accepted for a job when they can proof that they already bring SAP-skills from their time at university.



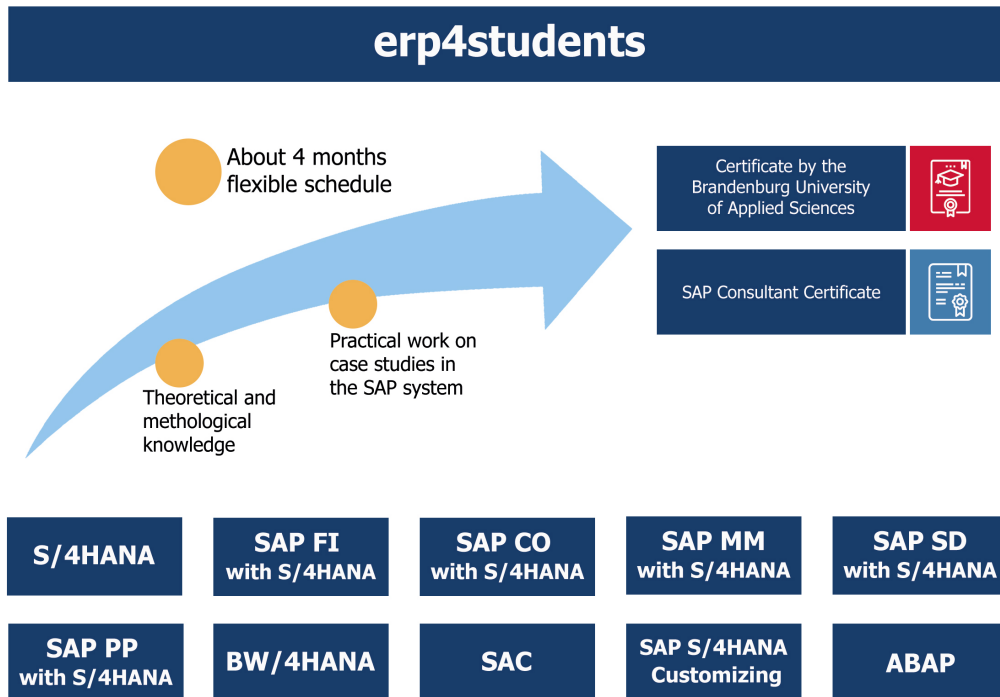
Since its foundation in 1972, SAP SE, based in Walldorf, Germany has become Europe's largest software developer. In the field of enterprise software, SAP is the world's market leader. More than 450,000 customers worldwide make use of SAP products in order to execute their business processes (e.g. controlling, sales, production, logistics, human resources, marketing etc.). Customers are mid-size business up to most of the big concerns noted at the stock market.

Enterprise Resource Planning (ERP), or the follow-up system SAP S/4HANA respectively, is the standard software all businesses need to run their business processes. In this field SAP ERP and SAP S/4HANA are the most prevalent products in the world! They cover all of the processes mentioned above and, thus, are used in many different divisions of a company. Additionally, products such as SAP BW (Business Warehouse), SAP FI (Financial Accounting) and many more are specially tailored for certain business areas. SAP BW, e. g., provides a powerful tool to analyse company data and thus helps to make important decisions. In order to adjust SAP products to a company's structure it can be customized exactly according to the respective needs. The possibilities are endless.

With the growing number of SAP customers, the need for young professionals with SAP-skills increases – no matter in which area. SAP is, for example, used by logistic companies, the telecommunication sector, automotive companies, as well as banks and the retail sector. No matter which area and position you prefer, SAP-skills are needed – and evermore often expected – in almost any of them. Thus, having a basic understanding of SAP is a great asset to any application. Additional specialisations in certain SAP areas such as SAP BW and SAP FI (and others) can help concretising one's own plan of the personal career and reaching intended goals quicker.

# GAIN SAP SKILLS WITH ERP4STUDENTS!

Industry has been complaining for a long time that a university education is not enough in order to prepare students for the challenges of their later professional lives. The focus on theoretical and methodical knowledge is very beneficial over a long period of time. However, it rarely helps to deal with actual challenges at work. In a business environment skills and competencies are required in addition to subject-matter knowledge.



This graphic was created using resources from Flaticon.com ('Certificate' Icons: Itim2101).

Studies have shown that students acquire competencies when confronted with challenges they have to tackle individually or in small teams. The latter becoming more and more important due to the rise of agile project management approaches. The acquired competencies have a lasting effect and can be used to solve new problems. It is, however, necessary that students engage with the subject intensively. Self-directed, situational learning (i.e. dealing with real problems based on case studies) is seen to specifically foster competencies; it facilitates generalized knowledge acquisition. This kind of knowledge, developed through abstraction from individual experience, always has a direct link to an actual situation in contrast to pure abstract knowledge. It is of utmost importance to encourage students to regularly reflect on experiences they gained in the practical study of the topic. E-learning courses with a focus on practical case studies can convey generalized knowledge. erp4students is proud to offer a curriculum of courses that combine important theoretical contents with hands-on case studies. Thus, students can be sure to gain a long lasting theoretical knowledge they can later easily apply practically when they face challenges in a professional environment.

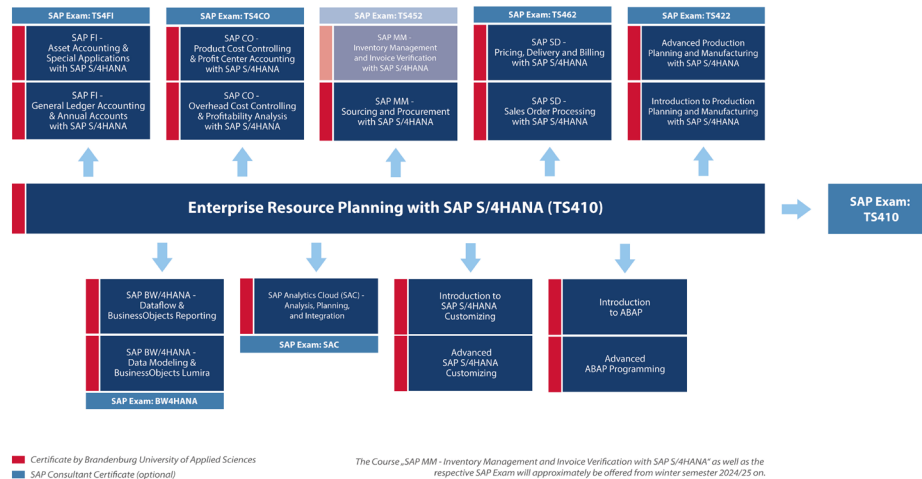
erp4students is a program of the Brandenburg University of Applied Sciences exclusively available for students. erp4students (offered since 2006) holds the rare opportunity for students to get in touch with SAP software products while at university and to gain relevant competencies in working with the world's leading enterprise software.

Participants, thus, acquire a clear competitive edge on the job market in comparison to other graduates. In addition to theoretical basics on the respective subject matter, students get the chance to work on an actual SAP system.

# BRIEF MODULE OVERVIEW

erp4students provides a broad expertise in the field of SAP software. In several e-learning courses, you will gain precious practical skills in working with different software products of SAP, as well as the theoretical and methodological background that is required in the official SAP certification exams.

The illustration below clarifies the topical connection between the courses: The common basis of the program is the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“. On this basis, the other areas build up. When there is more than one course in a specific area, these courses are consecutive and thus based on each other.



The aim of erp4students is also to prepare all participants for the official SAP SE consultant exams. The theoretical content of the official SAP classroom trainings is therefore covered in all courses and supplemented by the practical approaches mentioned. After completing the respective courses, you have the opportunity to take the respective SAP consultant certification at special conditions.

erp4students offers SAP certification exams in the following areas: SAP S/4HANA (TS410), SAP FI with SAP S/4HANA (TS4FI), SAP CO with SAP S/4HANA (TS4CO), SAP SD with SAP S/4HANA (TS462), SAP PP with SAP S/4HANA (TS420), SAP BW/4HANA (BW4HANA), SAP Analytics Cloud (SAC).

*The SAP exams can be taken conveniently online from home. The exam date can be scheduled individually and taken at any time of the day (even on weekends).*

For students, flexibility is probably the most important aspect about erp4students.

All resources are accessible 24 hours a day – even on weekends and during semester breaks! The only deadline is the last day of the course.



## ENTERPRISE RESOURCE PLANNING WITH SAP S/4HANA (TS410)

In the „Enterprise Resource Planning with SAP S/4HANA (TS410)“ course, the participants not only acquire profound theoretical knowledge of the structure of the S/4HANA system. By working on case studies, they also gain important practical experience in using the system. After completing the course, the SAP consultant exam TS410 can be taken at special conditions.

erp4students Course	Covers Topics of SAP Course	Price at SAP Education	Fee at erp4students
Enterprise Resource Planning with SAP S/4HANA	TS410	6.900 € + VAT	400 €
SAP Exam		400 € + VAT	150 €
Total Fee:		7.300 € + VAT	550 €

## SAP FINANCIAL ACCOUNTING WITH SAP S/4HANA (SAP FI)

Course participants can take the SAP consultant certification exam TS4FI after booking the two courses „SAP FI - General Ledger Accounting & Annual Accounts with S/4HANA“ and „SAP FI - Asset Accounting & Special Applications with S/4HANA“. In addition to the detailed description of the SAP FI application, its main components and their business background, important integration points to other SAP S/4HANA applications are shown - in particular for Controlling, Asset Management as well as Supplier and Customer Processes.

erp4students Course	Covers Topics of SAP Course	Price at SAP Education	Fee at erp4students
SAP FI - General Ledger Accounting & Annual Accounts with SAP S/4HANA	TS4F01	6.900 € + VAT	450 €
SAP FI - Asset Accounting & Special Applications with SAP S/4HANA	TS4F02	6.900 € + VAT	450 €
SAP Exam		400 € + VAT	150 €
Total Fee:		14.200 € + VAT	1.050 €

## SAP CONTROLLING WITH SAP S/4HANA (SAP CO)

After completing the courses, you will have in-depth, theoretical knowledge of the SAP S/4HANA system in general and the Controlling component SAP CO in particular. Together, the courses prepare you for the SAP consultant certification TS4CO, which can be taken at special conditions.

erp4students Course	Covers Topics of SAP Course	Price at SAP Education	Fee at erp4students
SAP CO - Overhead Cost Controlling & Profitability Analysis with SAP S/4HANA	TS4F03	6.900 € + VAT	450 €
SAP CO - Product Cost Controlling & Profit Center Accounting with SAP S/4HANA	TS4F04	6.900 € + VAT	450 €
SAP Exam		400 € + VAT	150 €
Total Fee:		14.200 € + VAT	1.050 €

## SAP MATERIALS MANAGEMENT WITH SAP S/4HANA (SAP MM)

After booking the two courses „SAP MM - Sourcing and Procurement with SAP S/4HANA“ and „SAP MM - Inventory Management and Invoice Verification with SAP S/4HANA“ you can take part in the SAP consultant certification TS452 at special conditions. After completing the courses, the participants will have knowledge of how to use the Materials Management component SAP MM in general and specifically in MM-related areas such as Organizational Units in Materials Management, Master Data in Materials Management, Determination of Source of Supply, Customizing of Purchasing Processes, Monitoring and Analytics in Procurement, and many more.

erp4students Course	Covers Topics of SAP Course	Price at SAP Education	Fee at erp4students
SAP MM - Sourcing and Procurement with SAP S/4HANA	S4500, S4520, S4550	11.060 € + VAT	450 €
SAP MM - Inventory Management and Invoice Verification with SAP S/4HANA	S4510, S4515, S4525	7.900 € + VAT	450 €
SAP Exam		200 € + VAT	150 €
Total Fee:		19.160 € + VAT	1.050 €

**Note: The course „SAP MM - Inventory Management and Invoice Verification with SAP S/4HANA“ as well as the SAP exam will approximately be available from winter semester 2024/25 on.**

## SAP SALES & DISTRIBUTION WITH SAP S/4HANA (SAP SD)

After booking the two courses „SAP SD - Sales Order Processing with SAP S/4HANA“ and „SAP SD - Pricing, Delivery and Billing with SAP S/4HANA“ you can take part in the SAP consultant certification TS462 at special conditions. After completing the courses, the participants will have knowledge of how to use the Sales component SAP SD in general and specifically in SD-related areas such as Organizational Units in Sales, Customer Order Processing, Sales Monitoring and Analyses, Customizing and the application of Price Conditions, Delivery and Billing Processes and many more.

erp4students Course	Covers Topics of SAP Course	Price at SAP Education	Fee at erp4students
SAP SD - Sales Order Processing with SAP S/4HANA	S4600, S4605, S4650	9.300 € + VAT	450 €
SAP SD - Pricing, Delivery and Billing with SAP S/4HANA	S4610, S4615, S4620	5.425 € + VAT	450 €
SAP Exam		200 € + VAT	150 €
Total Fee:		14.925 € + VAT	1.050 €

## SAP PRODUCTION PLANNING AND MANUFACTURING WITH SAP S/4HANA (SAP PPS)

The two courses cover the respective SAP classroom trainings and together prepare for the SAP consultant certification in the area of Production Planning & Manufacturing (TS420). The exam can be taken at special conditions after the two courses have been booked. In addition to imparting the theory required for the exam, the aim is to enable the participants to use the functions of the area of Production Planning and Manufacturing as well as large parts of the area of Materials Management and Production in an SAP ERP system (SAP S/4HANA). You will also get an insight into extended planning with PP/DS.

erp4students Course	Covers Topics of SAP Course	Price at SAP Education	Fee at erp4students
Introduction to Production Planning and Manufacturing with SAP S/4HANA	S4H00, S4200, S4220	9.750 € + VAT	450 €
Advanced Production Planning and Manufacturing with SAP S/4HANA	S4200, S4225	7.500 € + VAT	450 €
SAP Exam		400 € + VAT	150 €
Total Fee:		17.650 € + VAT	1.050 €



# SAP ANALYTICS

## SAP BUSINESS WAREHOUSE (SAP BW4/HANA)

After completing the BW/4HANA module, the official BW/4HANA consultant certification can be taken at special conditions. After completing the courses, you will have in-depth, theoretical knowledge of the SAP BW/4HANA system, its technical aspects, the structure of the underlying data model and the procedure for creating Analyzes and Reports.

erp4students Course	Covers Topics of SAP Course	Price at SAP Education	Fee at erp4students
SAP BW4/HANA - Dataflow and BusinessObjects Reporting	BW405, BW410	7.505 € + VAT	450 €
SAP BW/4HANA - Data Modeling and BusinessObjects Lumira	BW430, BW450	7.505 € + VAT	450 €
SAP Exam		400 € + VAT	150 €
<b>Total Fee:</b>		<b>15.410 € + VAT</b>	<b>1.050 €</b>

## SAP ANALYTICS CLOUD (SAC)

As a course participant, you will learn how to deal with the different components of the SAC system and how to integrate them within complex Modelling, Analysis and Planning scenarios by first acquiring the theoretical basics and then intensively working on case studies based on integrated scenarios. This enables you to understand how the SAC system works on a fundamental level in such a way that you can quickly familiarize yourself with the specific environment of an unfamiliar SAC system. After completing the course, the SAP consultant exam C\_SAC can be taken at special conditions.

erp4students Course	Covers Topics of SAP Course	Price at SAP Education	Fee at erp4students
SAP Analytics Cloud (SAC) - Analysis, Planning, and Integration	SACE11, SACS21, SACP21, SACP31	8.690 € + VAT	450 €
SAP Exam		200 € + VAT	150 €
<b>Total Fee:</b>		<b>8.890 € + VAT</b>	<b>600 €</b>

## CONFIGURATION & PROGRAMMING

### SAP S/4HANA CUSTOMIZING

In the courses, the participants develop important knowledge and skills regarding the Customization of an SAP S/4HANA system. The areas of Production, Logistics/Sales, Accounting/Controlling and Human Resources are taken into account in the process customizing. Organizational customizing is also highlighted. After completing the courses, the students are prepared for the practical use of the SAP S/4HANA system in the roles of project team members and end users. They gain learn skills regarding the implementation of specific implementation projects of an S/4HANA system.

<b>erp4students Course</b>	<b>Fee at erp4students</b>
Introduction to SAP S/4HANA Customizing	450 €
Advanced SAP S/4HANA Customizing	450 €
<b>Total Fee:</b>	<b>900 €</b>

### ABAP PROGRAMMING

Due to the large spectrum of possibilities with ABAP, the erp4students course is not designed to teach students every single command of the language. The focus is rather to deal with practical problems within an SAP ERP system, to use specific tools of the integrated programming environment of SAP ERP, and to understand how the language is integrated into the system in its entirety. In order to be able to take part in the courses, it is necessary for the participants to be proficient in at least one object-oriented programming language (e.g. Java).

<b>erp4students Course</b>	<b>Covers Topics of SAP Course</b>	<b>Price at SAP Education</b>	<b>Fee at erp4students</b>
Introduction to ABAP	BC100, SAPTEC, BC400, BC410, BC414, BC430, BC405	19.750 € + VAT	450 €
Advanced ABAP Programming	BC401, BC402, BC425, NET310, BC405	19.750 € + VAT	450 €
<b>Total Fee:</b>		<b>39.500 € + VAT</b>	<b>900 €</b>



**SAP S/4HANA**

# **ENTERPRISE RESOURCE PLANNING WITH SAP S/4HANA (TS410)**

## ENTERPRISE RESOURCE PLANNING WITH SAP S/4HANA (TS410)

Enterprise Resource Planning, or in short ERP, is a standard software for any business around the world. ERP systems help to organise big amounts of data and plan enterprise resources most efficiently. All of the business processes within an organization, such as controlling, human resources, manufacturing, supply chain management, project management etc., can be controlled via an ERP system. It depends on the kind of organisation which functional areas are needed and, thus, what kind of requirements have to be satisfied. However, to meet an ERP system in a future job in any kind of organisation is more than likely. SAP being the world market leader in this area of enterprise software, SAP S/4HANA is the most prevalent ERP system there is.

The erp4students course Enterprise Resource Planning with SAP S/4HANA (TS410) functions as the perfect introduction into the "SAP-universe". Not only does it present the setup and functions of the SAP S/4HANA system theoretically, complex case studies also help the participants to gain a profound practical understanding of the system. This, in the end, helps to quicker understand the ERP system of a future employer and, thus, makes an application strike out.

### TS410 CONSULTANT CERTIFICATION

After the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“, you can take the official SAP consultant exam. If successful, the globally recognized SAP SE consultant certificate is awarded.

The exam is a computer-based multiple-choice test (duration: three hours) and can be taken online from the comfort of your own home. The exam date can be scheduled individually and carried out at any time of the day (even on weekends).

erp4students Course	Course at SAP Education
Enterprise Resource Planning with SAP S/4HANA (TS410)	TS410
<b>SAP Exam: C_TS410</b>	

This course focuses on the topic of Enterprise Resource Planning (ERP). For the practical implementation of the content, the newest solution of the world market leader in the field of business software – SAP S/4HANA – is used.

SAP ERP is currently the most commonly used standard operating software worldwide. With S/4HANA, however, the successor based on the SAP HANA database is already in the starting blocks. This course aims to prepare students for current and future challenges in dealing with this complex subject area. The SAP S/4HANA enterprise software provides a comprehensive insight into the theoretical foundations of Enterprise Resource Planning and shows the decisive innovations in the S/4HANA system.

Using case studies on integrated business processes, which the students actively carry out in an S/4HANA system, the theoretical knowledge is then practically implemented and deepened. The theoretical basis and the case studies cover practically the entire range of core areas (ECC) of the S/4HANA systems. As a result, participants in this course will gain a comprehensive overview of the functional areas of the S/4HANA system: Logistics (LO), Financial Accounting (FI), Controlling (CO) and Human Capital Management (HCM).

For accessing the SAP system, SAP's next-generation user interface FIORI UX is used. Students will become acquainted with the new architecture, design and mode of operation of this innovative UI. In addition, integration points to SAP Hybris (CRM), SAP Ariba (Procurement), and SAP Success Factors (HR) are presented.

The participants are furthermore also prepared for the original certificate exam of SAP's own course TS410. Participants can take the SAP Consultant Certificate Exam (TS410) after completing the course.



### LEARNING TARGETS

After completion of the course, the students will have a comprehensive theoretical and practical knowledge of the SAP S/4HANA system based on practical experience and extensive explanations of the individual S/4HANA functional modules. This refers in particular to technical aspects, the organizational structure and the integration of a large number of business processes and functional areas.

The practical work on the business process scenarios presented in the integrated case studies enables the course participants to understand the function of SAP S/4HANA fundamentally. This gives the participants the skills to familiarize themselves quickly with any unknown SAP S/4HANA systems later in their career. When completing the course, the participants specifically have the skills and knowledge of the following functions and their integration within complex business processes:

- Logistics
  - Purchasing
  - Inventory Management
  - Warehouse Management
  - Production Control
  - Sales and Distribution
  - Plant maintenance
  - Project Management
- Accounting
  - Financial Accounting
  - Controlling
- Human Capital Management

## STRUCTURE

- SAP NetWeaver, SAP BW and SAP BO
- SAP HANA, SAP ERP and S/4HANA
- SAP FIORI UX
- Purchase-to-Pay Business Process
- Make-to-Order Business Process
- Order-to-Cash Business Process
- Human Capital Management
- Financial Accounting
- Management Accounting
- Enterprise Asset Management
- Project Management

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 400 €
- SAP Exam Fee: 150 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification with the name TS410 requires the contents of the course:

- Enterprise Resource Planning with SAP S/4HANA (TS410)





**SAP S/4HANA**

# **SAP FINANCIAL ACCOUNTING WITH SAP S/4HANA (SAP FI)**

# SAP FINANCIAL ACCOUNTING WITH SAP S/4HANA (SAP FI)

The SAP S/4HANA application SAP FI (Financial Accounting) is responsible for the administration and presentation of accounting data and is therefore the core component of an SAP S/4HANA system. SAP FI fulfils the international requirements for external accounting. Recording all business transactions according to the document principle ensures a complete audit trail from the balance sheet to the individual document. As a result, each business case relevant to the balance sheet and income statement is posted in FI or transferred to FI. The flow of data between SAP FI and other components of the SAP system is open and integrated, this means that it is characterized by automatic updating. The data is available in financial accounting in real-time. This allows management to assess the financial situation of a company ad hoc and at any time.

SAP FI handles e.g. the financial relationships with suppliers and customers, such as the booking of receivables and payables, the collection of shipments and payments as well as the processing and issuing

of reminders and account statements. SAP FI is therefore essential for the preparation of business information as the basis for strategic decisions.

## Financial Accounting with SAP S/4HANA

The standard software SAP S/4HANA is currently the most frequently used ERP software worldwide. The Financial Accounting application represents the most widely used component of the SAP S/4HANA system. Theoretical knowledge and practical experience with the SAP S/4HANA system - and especially with the core component Financial Accounting - are therefore often the basic requirements for professional entry or promotion.

While theoretical ERP knowledge is often part of scientific curricula, the link to practice is usually lacking. Practical experience with a „living“ SAP S/4HANA system offers you a clear competitive advantage.

## SAP FI CONSULTANT CERTIFICATION

After the „SAP Financial Accounting with SAP S/4HANA“ module, you can take the official SAP consultant exam. If successful, the globally recognized SAP SE consultant certificate is awarded.

The exam is a computer-based multiple-choice test (duration: three hours) and can be taken online from the comfort of your own home. The exam date can be scheduled individually and carried out at any time of the day (even on weekends).

erp4students Course	Course at SAP Education
SAP FI - General Ledger Accounting & Annual Accounts with SAP S/4HANA	TS4F01
SAP FI - Asset Accounting & Special Applications with SAP S/4HANA	TS4F02
<b>SAP Exam: C_TS4FI</b>	

This course focuses on accounting and how this intrinsically important area of business administration is implemented within the framework of the world leading standard software in the area of Enterprise Resource Planning SAP S/4HANA. The SAP S/4HANA application used for this purpose is called SAP FI(Financial Accounting).

Based on an integrated business scenario which you will accomplish directly in the SAP S/4HANA system, the central topics of Financial Accounting are systematically presented. While working on the system, you gradually get acquainted with all levels of the SAP S/4HANA system. This includes the customizing of your own organizational model, creation of your own master data records, and the customizing and implementation of your own integrated business processes in the area of Financial Accounting. The practical case studies cover the following areas in particular:

- Organizational Model in SAP S/4HANA with special focus on SAP FI
- Master Data in SAP S/4HANA with special focus on SAP FI
- Business Processes in the areas of General Ledger Accounting, Payment Processing, Dunning, Parallel Accounting, Subledger Accounting, and Year End Closing

In addition to the detailed description of the SAP FI application, its main components and its business background, important integration points to other SAP S/4HANA applications are presented, too, in particular for controlling as well as supplier and customer processes.

The course is rounded off by background information on project management as part of the introduction of standard software, the organizational units and structures, and the process components of the SAP system for mapping companies and business processes that is integrated in the case studies.



### LEARNING TARGETS

After completing the course, you will have in-depth theoretical knowledge of the SAP S/4HANA system in general and of the Financial Accounting component SAP FI in particular. You will be able to apply both the SAP S/4HANA system and the FI component in a new environment. You will gain knowledge through a comprehensive description of the organizational structures, their links in the SAP S/4HANA system and through the focus on mapping integrated business processes in accounting.

In particular, you will acquire knowledge and skills in the following FI-related areas:

- General Ledger Accounting
- Payment Processing
- Dunning
- Parallel Accounting
- Subledger Accounting
- Closing Activities
- Controlling

## STRUCTURE

- Introduction to SAP S/4HANA
  - Foundations Enterprise Resource Planning
  - Organizational Levels, Master Data, Processes and Reporting in SAP S/4HANA
  - Foundations SAP NetWeaver
  - Foundations SAP Business Warehouse
- Introduction to SAP FI and SAP CO
  - Overview SAP FI
  - Overview SAP CO
- Organizational Levels and Master Data in SAP FI
  - Customizing of Organizational Units of SAP FI
  - Customizing the Basic Settings (Calendar, Fiscal Year, Currency)
  - Customizing of Master Data of SAP FI
- Business Processes in SAP FI
  - Parallele Rechnungslegung
  - Geschäftsprozesse in SAP FI
- Closing Activities in SAP S/4HANA
  - Closing Overview and Basic Settings
  - Balance Sheet / Profit and Loss Statement
  - Receivables and Liabilities
  - Accruals and Deferrals
  - Technical, Organizational and Documentary Closing Activities
  - Closing Cockpit

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Microsoft Windows System (PC or Mac with VM: free versions available)
  - Recommended: Microsoft Office
  - At least 700 MB free hard drive space
  - Internet Access
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS4FI requires the content of the following consecutive courses and can be booked at [erp4students](#) on special conditions:

- SAP FI - General Ledger Accounting & Annual Accounts with SAP S/4HANA
- SAP FI - Asset Accounting & Special Applications with SAP S/4HANA

This course builds on the course „SAP FI - General Ledger & Annual Accounts with SAP S/4HANA“ and covers further central aspects of the SAP S/4HANA application SAP FI to provide a complete picture of this application.

Based on an integrated business scenario which you will accomplish directly in the SAP S/4HANA system, the central topics of Financial Accounting are systematically presented. While working on the system, you gradually get acquainted with all levels of the SAP S/4HANA system. This includes the customizing of your own organizational model, creation of your own master data records, and the customizing and implementation of your own integrated business processes in the area of Financial Accounting. In addition, you will intensively deal with the information systems of the SAP FI application as well as various standard and drill-down reports and define your own reports.

Building on the knowledge gained from the first course, you will deal in particular with the following areas in the case studies:

- Organizational Models in SAP S/4HANA with special focus on SAP FI
- Master Data in SAP S/4HANA with special focus on SAP FI
- Business Processes in the areas of Asset Accounting, Valuation and Depreciation
- Special Applications of Document Control, Document Validation and Substitution as well as Document Splitting in General Ledger and Subledger Accounting
- Standard Reports, Drill-down Reporting and Information Systems in Financial Accounting

In addition to the detailed description of the SAP FI application, its main components and its business background, important integration points to other SAP S/4HANA applications are presented, too, in particular for controlling, asset management and supplier and customer processes.



### LEARNING TARGETS

After completing the course, you will have in-depth theoretical knowledge of the SAP S/4HANA system in general and of the Financial Accounting component SAP FI in particular. You will be able to apply both the SAP S/4HANA system and the FI component in a new environment. You will gain knowledge through a comprehensive description of the organizational structures, their links in the SAP S/4HANA system and through the focus on mapping integrated business processes in accounting.

In particular, you will acquire knowledge and skills in the following FI-related areas Asset Accounting, Document Control, Document Validation and Substitution and Document Splitting as well as information systems of the Financial application.

By dealing with the respective SAP S/4HANA organizational units and their integration as well as the mapping of complete business processes, you gain a holistic understanding of the Financial Accounting component in SAP S/4HANA and the interaction of the individual areas within this component as well as the integration of the component with others SAP S/4HANA applications. As a project employee or end user, you will be prepared for the practical use of the SAP S/4HANA system and the SAP FI component.

## STRUCTURE

- Asset Accounting (SAP FI-AA)
  - Organizational Structures in SAP FI (AA)
  - Master Data in SAP FI (AA)
  - Business Processes in SAP FI (AA)
  - Periodic Tasks and Valuation in SAP FI (AA)
- Special Applications in SAP FI
  - Special G/L Transactions
  - Validations and Substitutions
  - Document Splitting
- Reporting and Information Systems
  - Infosystems in SAP FI
  - Standard Reports in Financials and Controlling
  - SAP List Viewer
  - Drill-down-Reporting



## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Microsoft Windows System (PC or Mac with VM: free version available)
  - Recommended: Microsoft Office
  - At least 700 MB free hard drive space
  - Internet Access
- Other Requirements:
  - For participants without knowledge of SAP ERP we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
  - For participants without knowledge of SAP FI we urgently suggest the previous or parallel participation in the course „SAP FI - General Ledger & Annual Accounts with SAP S/4HANA“.
- Duration: ca. 4 months
- Course Certificate: Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course
- Course Fee: 450 €
- SAP Exam Fee: 150 €
  - Note: Registration for the SAP certification exam requires participation in both SAP S/4HANA FI courses.

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS4FI requires the content of the following consecutive courses and can be booked at [erp4students](#) on special conditions:

- SAP FI - General Ledger Accounting & Annual Accounts with SAP S/4HANA
- SAP FI - Asset Accounting & Special Applications with SAP S/4HANA





**SAP S/4HANA**

# **SAP CONTROLLING WITH SAP S/4HANA (SAP CO)**

# SAP CONTROLLING WITH SAP S/4HANA (SAP CO)

Controlling is of great importance for decision-making at management level, since it provides extremely important information and data. The corresponding controlling application SAP CO helps monitoring, coordinating and optimizing the processes running within a company.

Controlling has two main tasks: On the one hand, the documentation of the actual events. On the other hand, the planning of future events. By comparing actual and plan data, deviations can be determined, which can be used to control and correct the internal company processes.

Controlling (SAP CO) is an integral part of the accounting application (SAP FI) in SAP S/4HANA and, with its internal view of the company, forms the counter part to externally oriented finance. The data from SAP CO and SAP FI are integrated in real time via the Universal Journal. In this way, all cost-relevant data is passed on directly from financial accounting to controlling, whereby costs and revenues can be assigned to the individual CO-relevant cost centers, business processes or projects.

## Controlling with SAP S/4HANA

The standard software SAP S/4HANA is currently the most frequently used ERP software worldwide. In addition to the financial accounting application, the controlling application is the most used component of the SAP S/4HANA system by companies. A thorough theoretical and practical training in handling the SAP S/4HANA system - and in particular with one of the core components SAP CO - helps you to increase your own market value and to increase your chances on the job market. In particular, the practical experience with a „living“ SAP S/4HANA

## SAP CO CONSULTANT CERTIFICATION

After the „SAP Controlling with SAP S/4HANA“ module, you can take the official SAP consultant exam. If successful, the globally recognized SAP SE consultant certificate is awarded.

The exam is a computer-based multiple-choice test (duration: three hours) and can be taken online from the comfort of your own home. The exam date can be scheduled individually and carried out at any time of the day (even on weekends).

erp4students Course	Course at SAP Education
SAP CO - Overhead Cost Controlling & Profitability Analysis with SAP S/4HANA	TS4F03
SAP CO - Product Cost Controlling & Profit Center Accounting with SAP S/4HANA	TS4F04

## SAP Exam: C\_TS4CO

In this course you will deal with internal accounting (also known as Controlling) and how this inherently important area of business administration is implemented in the context of the latest standard software in the field of enterprise resource planning, SAP S/4HANA. The SAP S/4HANA application dealt with is SAP CO (Controlling).

With the help of an integrated business scenario that you actively carry out on the system, central topics of controlling are presented. You will work successively on all levels of the SAP S/4HANA system. This includes customizing your own organizational model, creating your own master data records, and customizing and carrying out your own integrated business processes in the area of controlling. The case studies deal with the following areas in a practice-oriented manner:

- Organizational Model in SAP S/4HANA with special focus on SAP CO
- Master Data in SAP S/4HANA with special focus on SAP CO
- Business Processes in the areas of Overhead Cost Controlling, Cost Center and Cost Element Accounting, Internal Order, Planning, Budgeting and Availability Control as well as Profitability Analysis

In addition to the detailed description of the SAP CO application, its main components and their business background, important points of integration with other SAP S/4HANA applications - in particular with financial accounting as well as purchasing and sales processes - are shown.

The course is rounded off by background information on project management as part of the introduction of standard software, the organizational units and structures, and the process components of the SAP system for mapping companies and business processes that is integrated in the case studies.

The SAP system is accessed via the new, future-oriented SAP user interface - FIORI UX - the structure and functionality of which is also explained in detail.



### LEARNING TARGETS

After completing the course, you will have in-depth theoretical knowledge of the SAP S/4HANA system in general and of the Controlling component SAP CO in particular. You will be able to apply both the SAP S/4HANA system and the CO component in a new environment. You will gain knowledge through a comprehensive description of the organizational structures, their links in the SAP S/4HANA system and through the focus on mapping integrated business processes in controlling.

You will also be able to orientate yourself generally in an ERP system. In particular, you will have in-depth knowledge and skills with regard to the SAP S/4HANA component SAP CO, in particular in the relevant areas of overhead cost controlling, cost center and cost element accounting, internal orders, planning and budgeting as well as profitability analysis. By dealing with the respective SAP S/4HANA organizational units and their integration as well as the mapping of complete business processes, you will gain a holistic understanding of the controlling component in SAP S/4HANA and the interaction of the individual areas within this component as well as the integration of the component with others SAP S/4HANA applications. As a result, you are prepared, for example, as a project employee or end user, for the practical use of the SAP S/4HANA system in general and the SAP CO component in particular.

## STRUCTURE

- SAP HANA, S/4HANA, SAP FIORI UX
- Organizational Levels and Master Data for Overhead Cost Controlling
- Business Processes in Cost Center and Cost Element Accounting
- Internal Orders
- Master Data and structures of Profitability Analysis
- Actual Dataflow and Cost Allocation
- Profitability Planning Process and Information Systems in CO-PA

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS4CO requires the content of the following consecutive courses and can be booked at [erp4students](#) on special conditions:

- SAP CO - Overhead Cost Controlling & Profitability Analysis with SAP S/4HANA
- SAP CO - Product Cost Controlling & Profit Center Accounting with SAP S/4HANA

In this course you will deal with internal accounting (also known as Controlling) and how this inherently important area of business administration is implemented in the context of the latest standard software in the field of enterprise resource planning, SAP S/4HANA. The SAP S/4HANA application dealt with is SAP CO (Controlling).

This course builds on the course SAP CO – Overhead Cost Controlling & Profitability Analysis with SAP S/4HANA and represents its consistent continuation by dealing with other central aspects of the SAP S/4HANA application SAP CO and thus conveying a complete picture of this application.

With the help of an integrated business scenario that you actively carry out on the system, central topics of controlling are presented. You will work successively on all levels of the SAP S/4HANA system. This includes customizing your own organizational model, creating your own master data records, and customizing and carrying out your own integrated business processes in the area of controlling. The case studies deal with the following areas in a practice-oriented manner:

- Organizational Model in SAP S/4HANA with special focus on SAP CO
- Master Data in SAP S/4HANA with special focus on SAP CO
- Business Processes in the areas of Product Cost Controlling, Cost Object Controlling as well as Profit Center Accounting

In addition to the detailed description of the SAP CO application, its main components and their business background, important points of integration with other SAP S/4HANA applications - in particular with financial accounting as well as purchasing and sales processes - are shown.

The course is rounded off by background information on project management as part of the introduction of standard software, the organizational units and structures, and the process components of the SAP system for mapping companies and business processes that is integrated in the case studies.

The SAP system is accessed via the new, future-oriented SAP user interface - Fiori UX - the structure and functionality of which is also explained in detail.



### LEARNING TARGETS

After completing the course, you will have in-depth theoretical knowledge of the SAP S/4HANA system in general and of the Controlling component SAP CO in particular. You will be able to apply both the SAP S/4HANA system and the CO component in a new environment. You will gain knowledge through a comprehensive description of the organizational structures, their links in the SAP S/4HANA system and through the focus on mapping integrated business processes in controlling.

You will also be able to orientate yourself generally in an ERP system. You will have in-depth knowledge and skills with regard to the SAP S/4HANA component SAP CO, in particular in the relevant areas of product cost controlling, cost object controlling as well as profit center accounting. By dealing with the respective SAP S/4HANA organizational units and their integration as well as the mapping of complete business processes, you will gain a holistic understanding of the controlling component in SAP S/4HANA and the interaction of the individual areas within this component as well as the integration of the component with others SAP S/4HANA applications. As a result, you are prepared, for example, as a project employee or end user, for the practical use of the SAP S/4HANA system in general and the SAP CO component in particular.

## STRUCTURE

- SAP HANA, S/4HANA, SAP FIORI UX
- Organizational Levels and Master Data for Product Cost Controlling
- Product Cost Planning
- Cost Object Controlling
- Profit Center Accounting



## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access, Microsoft Office recommended
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
  - For participants without knowledge of SAP CO we urgently suggest the previous or parallel participation in the course „SAP CO - Overhead Cost Control & Profitability Analysis with SAP S/4HANA“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €
- SAP Exam Fee: 150 €
  - Note: Registration for the SAP certification exam requires participation in both SAP S/4HANA CO courses.

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS4CO requires the content of the following consecutive courses and can be booked at erp4students on special conditions:

- SAP CO - Overhead Cost Controlling & Profitability Analysis with SAP S/4HANA
- SAP CO - Product Cost Controlling & Profit Center Accounting with SAP S/4HANA





**SAP S/4HANA**

# **SAP MATERIALS MANAGEMENT WITH SAP S/4HANA (SAP MM)**

## SAP MATERIALS MANAGEMENT WITH SAP S/4HANA (SAP MM)

Materials Management is of great importance for every company as it represents the central authority for the procurement and provision of materials for all needs in the company. The corresponding SAP application SAP MM helps with the implementation and processing of business processes relevant to material requirements, starting with the identification of material requirements, through the coordination of procurement processes, to the procurement of materials and settlement of supplier invoices.

Materials Management (SAP MM) is an integral part of the Logistics application (SAP LO) in SAP S/4HANA. Together with the other two main logistics applications - Production Planning (SAP PP) and Sales and Distribution (SAP SD) - it can consistently map all aspects of a company from a logistics perspective, including master data (customers, suppliers, materials), end business processes along the entire logistics supply chain (order processing, requirements planning, purchasing, production, delivery, shipping, billing) as well as monitoring and analysis of all business-relevant business partner, material and financial data. Integration with the financial application (SAP FI) makes it possible to map the financial supply

chain as well as monitor and analyze all financially relevant aspects of the company's procurement processes. Integration with the controlling application (SAP CO) allows monitoring and analysis of costs, profits and profitability segments related to the procurement processes.

The standard software SAP S/4HANA is currently the most frequently used ERP software worldwide. The SAP MM application is one of the central applications of the SAP S/4HANA system as it covers all material provisioning-related business processes in an enterprise. A thorough theoretical and practical training in handling the SAP S/4HANA system - and in particular with one of the core components SAP MM - helps you to increase your own market value and to increase your chances on the job market. In particular, the practical experience with a „living“ SAP S/4HANA system offers you a clear competitive advantage.

### SAP MM CONSULTANT CERTIFICATION

After the „SAP Materials Management with SAP S/4HANA“ module, you can take the official SAP consultant exam. If successful, the globally recognized SAP SE consultant certificate is awarded.

The exam is a computer-based multiple-choice test (duration: three hours) and can be taken online from the comfort of your own home. The exam date can be scheduled individually and carried out at any time of the day (even on weekends).

erp4students Course	Course at SAP Education
SAP MM - Sourcing and Procurement with SAP S/4HANA	S4500, S4520, S4550
SAP MM - Inventory Management and Invoice Verification with SAP S/4HANA	S4510, S4515, S4525
<b>SAP Exam: C_TS452</b>	

This course focuses on sourcing and procurement and how this intrinsically important area of business administration is implemented within the framework of the world leading standard software in the area of Enterprise Resource Planning SAP S/4HANA. The SAP S/4HANA application used for this purpose is called SAP MM (Materials Management).

Based on an integrated business scenario which you will accomplish directly in the SAP S/4HANA system, the central topics of Sourcing and Procurement are systematically presented. While working on the system, you gradually get acquainted with all levels of the SAP S/4HANA system. This includes the customizing of your own organizational model, creation of your own master data records, and the customizing and implementation of your own integrated business processes in the area of Sourcing and Procurement. The practical case studies cover the following areas in particular:

- Organizational Model in SAP S/4HANA with special focus on SAP MM
- Master Data in SAP S/4HANA with special focus on SAP MM
- Business Processes with a focus on Sourcing and Procurement

In addition to the detailed description of the SAP MM application, its main components and its business background, important integration points to other SAP S/4HANA applications are presented, too, in particular for financial accounting as well as controlling.

The course is rounded off by background information on project management as part of the introduction of standard software, the organizational units and structures, and the process components of the SAP system for mapping companies and business processes that is integrated in the case studies.



### LEARNING TARGETS

After completing the course, you will have in-depth theoretical knowledge of the SAP S/4HANA system in general and of the Materials Management component SAP MM in particular. You will be able to apply both the SAP S/4HANA system and the MM component in a new environment. You will gain knowledge through a comprehensive description of the organizational structures, their links in the SAP S/4HANA system and through the focus on mapping integrated business processes in procurement processing.

- Organizational Units in Materials Management
- Master Data in Materials Managements
- Determination of Source of Supply
- Customizing of Purchasing Processes
- Monitoring and Analytics in Procurement

## STRUCTURE

- Introduction to SAP S/4HANA
- Customizing Projects and Organizational Levels in SAP MM
  - Basics of the SAP Implementation Guide
  - Customizing Projects in SAP S/4HANA
  - Customizing of Organizational Units of SAP MM
- Master Data in SAP MM
  - Customizing of Master Data of SAP MM
  - Business Partner Master Data in SAP MM
  - Material Master Data in SAP MM
  - Pricing and Source of Supply in SAP MM
- Business Processes in SAP MM
  - Purchase Order Processing
  - Goods Receipt Processing
  - Invoice Verification
  - Stock Materials and Consumable Materials
  - Self-Service Requisition
  - Advanced Transactions in Procurement
  - Automated Procurement Process
  - Reporting and Analytics in SAP MM
- Process Customizing in SAP MM
  - Valuation and Account Assignment
  - Customizing of Document Types in SAP MM
  - Partner Functions in SAP MM
  - Material Determination
  - Text and Output Control
  - Optimized Purchasing
  - Document Release Procedures
  - Special Business Transactions and Business Processes in SAP MM

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 Hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS452 requires the content of the following consecutive courses and can be booked at [erp4students](#) on special conditions:

- SAP MM - Sourcing and Procurement with SAP S/4HANA
- SAP MM - Inventory Management and Invoice Verification with SAP S/4HANA

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### LEARNING TARGETS

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**Note: The course „SAP MM - Inventory Management and Invoice Verification with SAP S/4HANA“ as well as the SAP exam will approximately be available from winter semester 2024/25 on.**

## STRUCTURE

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## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language:
  - Englisch, German
- System Requirements:
  - Computer (PC, Mac) with internet access, Microsoft Office suggested
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
  - or participants without knowledge of SAP MM we urgently suggest the previous or parallel participation in the course „SAP MM - Sourcing and Procurement with SAP S/4HANA“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €
- SAP Exam Fee: 150 €
  - Note: Registration for the SAP certification exam requires participation in both SAP S/4HANA MM courses.

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS452 requires the content of the following consecutive courses and can be booked at [erp4students](#) on special conditions:

- SAP MM - Sourcing and Procurement with SAP S/4HANA
- SAP MM - Inventory Management and Invoice Verification with SAP S/4HANA

**Note: The course „SAP MM - Inventory Management and Invoice Verification with SAP S/4HANA“ as well as the SAP exam will approximately be available from winter semester 2024/25 on.**





**SAP S/4HANA**

# **SAP SALES & DISTRIBUTION WITH SAP S/4HANA (SAP SD)**

## SAP SALES & DISTRIBUTION WITH SAP S/4HANA (SAP SD)

Sales and Distribution is of great importance for any company, as it is the central piece for establishing customer relationships, selling products and generating revenue. The corresponding sales and distribution application SAP SD helps implementing and running sales-relevant business processes, starting with identifying sales opportunities, coordinating sales processes, distributing products, and billing the customers.

Sales and Distribution (SAP SD) is an integral part of the logistics application (SAP LO) in SAP S/4HANA. Together with the other two main logistics applications – production planning (SAP PP) and material management (SAP MM) – it can map all aspects of a business from a logistical point of view, including master data (customer, products), end-to-end business processes spanning the entire logistical supply chain (sales order processing, requirements planning, purchasing, make-to-order production, delivery, shipping, billing), as well as monitoring and analyzing

all business relevant customer, product and financial data. Integration with the financial application (SAP FI) allows mapping the financial supply chain as well as monitoring and analyzing all financially-relevant aspects of the company's sales processes. Integration with the controlling application (SAP CO) allows monitoring and analyzing costs, profits and profitability segments associated with the sales processes.

The standard software SAP S/4HANA is currently the most frequently used ERP software worldwide. The SAP SD application is one of the central applications of the SAP S/4HANA system as it covers all customer-related business processes in an enterprise. A thorough theoretical and practical training in handling the SAP S/4HANA system - and in particular with one of the core components SAP SD - helps you to increase your own market value and to increase your chances on the job market. In particular, the practical experience with a „living“ SAP S/4HANA system offers you a clear competitive advantage.

### SAP SD CONSULTANT CERTIFICATION

After the „SAP Sales & Distribution with SAP S/4HANA“ module, you can take the official SAP consultant exam. If successful, the globally recognized SAP SE consultant certificate is awarded.

The exam is a computer-based multiple-choice test (duration: three hours) and can be taken online from the comfort of your own home. The exam date can be scheduled individually and carried out at any time of the day (even on weekends).

erp4students Course	Course at SAP Education
SAP SD - Sales Order Processing with SAP S/4HANA	S4600, S4605, S4650
SAP SD - Pricing, Delivery and Billing with SAP S/4HANA	S4610, S4615, S4620
<b>SAP Exam: C_TS462</b>	

This course focuses on sales and distribution and how this intrinsically important area of business administration is implemented within the framework of the world leading standard software in the area of Enterprise Resource Planning SAP S/4HANA. The SAP S/4HANA application used for this purpose is called SAP SD (Sales and Distribution).

Based on an integrated business scenario which you will accomplish directly in the SAP S/4HANA system, the central topics of Sales Processing are systematically presented. While working on the system, you gradually get acquainted with all levels of the SAP S/4HANA system. This includes the customizing of your own organizational model, creation of your own master data records, and the customizing and implementation of your own integrated business processes in the area of Sales and Distribution. The practical case studies cover the following areas in particular:

- Organizational Model in SAP S/4HANA with special focus on SAP SD
- Master Data in SAP S/4HANA with special focus on SAP SD
- Business Processes with a focus on Sales Order Processing

In addition to the detailed description of the SAP SD application, its main components and its business background, important integration points to other SAP S/4HANA applications are presented, too, in particular for financial accounting as well as controlling.

The course is rounded off by background information on project management as part of the introduction of standard software, the organizational units and structures, and the process components of the SAP system for mapping companies and business processes that is integrated in the case studies.



### LEARNING TARGETS

After completing the course, you will have in-depth theoretical knowledge of the SAP S/4HANA system in general and of the Sales and Distribution component SAP SD in particular. You will be able to apply both the SAP S/4HANA system and the SD component in a new environment. You will gain knowledge through a comprehensive description of the organizational structures, their links in the SAP S/4HANA system and through the focus on mapping integrated business processes in sales processing. In particular, you will acquire knowledge and skills in the following SD-related areas:

- Organizational Units in Sales and Distribution
- Master Data in Sales and Distribution
- Sales Order Processing
- Customizing of Sales Processes
- Sales Monitoring and Analytics

## STRUCTURE

- Introduction to SAP S/4HANA
- Organizational Levels and Master Data in SAP SD
  - Customizing of Organizational Units of SAP SD
  - Customizing of Master Data of SAP SD
- Business Processes in SAP SD
  - Presales Activities
  - Sales Order Processing
  - Outbound Delivery Processing
  - Make-to-Order Production
  - Sales Processes for Service Products
  - Sales Monitoring and Analytics
- Process Customizing in SAP SD
  - Defining Sales Document Types
  - Data Flow and Copy Control
  - Partner Functions in SD
  - Material Determination
  - Outline Agreements
  - Text and Output Control
  - Incompletion Check
  - Blocking Reasons
  - Special Business Transactions in SD

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 Hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS462 requires the content of the following consecutive courses and can be booked at [erp4students](http://erp4students) on special conditions:

- SAP SD - Sales Order Processing with SAP S/4HANA
- SAP SD - Pricing, Delivery and Billing with SAP S/4HANA

This course focuses on sales and distribution and how this intrinsically important area of business administration is implemented within the framework of the world leading standard software in the area of Enterprise Resource Planning SAP S/4HANA. The SAP S/4HANA application used for this purpose is called SAP SD (Sales and Distribution).

Based on an integrated business scenario which you will accomplish directly in the SAP S/4HANA system, the central topics of Pricing, Delivery and Billing are systematically presented. While working on the system, you gradually get acquainted with all levels of the SAP S/4HANA system. This includes the customizing of your own organizational model, creation of your own master data records, and the customizing and implementation of your own integrated business processes in the area of Sales and Distribution. The practical case studies cover the following areas in particular:

- Organizational model in SAP S/4HANA with special focus on SAP SD
- Master Data in SAP S/4HANA with special focus on SAP SD
- Business processes with a focus on Pricing, Delivery, and Billing Processing

In addition to the detailed description of the SAP SD application, its main components and its business background, important integration points to other SAP S/4HANA applications are presented, too, in particular for financial accounting as well as controlling.

The course is rounded off by background information on project management as part of the introduction of standard software, the organizational units and structures, and the process components of the SAP system for mapping companies and business processes that is integrated in the case studies.

This course requires that the course SAP SD - Sales Order Processing with SAP S/4HANA has been successfully completed and that the contents discussed there have been internalized.



### LEARNING TARGETS

After completing the course, you will have in-depth theoretical knowledge of the SAP S/4HANA system in general and of the Sales and Distribution component SAP SD in particular. You will be able to apply both the SAP S/4HANA system and the SD component in a new environment. You will gain knowledge through a comprehensive description of the organizational structures, their links in the SAP S/4HANA system and through the focus on mapping integrated business processes in sales processing. In particular, you will acquire knowledge and skills in the following SD-related areas:

- Organizational Units in Sales and Distribution
- Master Data in Sales and Distribution
- Customizing and Application of Pricing Conditions
- Customizing and Application of Delivery Processes
- Customizing and Application of Billing Processes
- Sales Monitoring and Analytics

## STRUCTURE

- Pricing in Sales and Distribution Processes
  - Condition Technique in Pricing
  - Pricing Configuration
  - Condition Records
  - Special Pricing Functions
  - Condition Types
  - Condition Contract Management
- Delivery in Sales and Distribution Processes
  - Basic Organizational Units for the Delivery Process
  - Structure and Functions of the Delivery Document
  - Controlling Delivery Processes
  - Goods Issue Process Based on the Delivery
  - Processes and Functions based on the Delivery with Embedded EWM
- Billing in Sales and Distribution Processes
  - Basic Organizational Units for the Billing Process
  - Structure and Functions of the Billing Process
  - Controlling the Billing Process
  - Special billing Types
  - Types of Settlement
  - Special Business Processes in Billing
  - Interface Between Sales and Distribution and Financial Accounting

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
  - For participants without knowledge of SAP SD we urgently suggest the previous or parallel participation in the course „SAP SD - Sales Order Processing with SAP S/4HANA“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €
- SAP Exam Fee: 150 €
  - Note: Registration for the SAP certification exam requires participation in both SAP S/4HANA SD courses.

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS462 requires the content of the following consecutive courses and can be booked at erp4students on special conditions:

- SAP SD - Sales Order Processing with SAP S/4HANA
- SAP SD - Pricing, Delivery and Billing with SAP S/4HANA





**SAP S/4HANA**

# **SAP PRODUCTION PLANNING AND MANUFACTURING WITH SAP S/4HANA (SAP PP)**

# SAP PRODUCTION PLANNING AND MANUFACTURING WITH SAP S/4HANA (SAP PP)

Manufacturing companies from a wide variety of industry sectors (e.g., chemical industry, automotive industry, high-tech, metal processing) today rely on SAP PP (production planning and control) to handle business processes using IT technology. This includes, for example, order processing, planning, construction, assembly and distribution. PPS helps to plan all important steps in production according to the required quantities, dates and capacities and to manage this data.

SAP PP is not a stand-alone software product, but a technical discipline that is carried out via different systems. In the erp4students courses on PPS, the focus is on the SAP S/4HANA system. In the courses, you will get to know the SAP S/4HANA system in such a way that you can carry out all the necessary steps for production planning and control via the system; This includes demand planning, material requirements planning, and all steps to carry out production.

In addition, you will get an insight into advanced planning with PP/DS (Production Planning / Detailed Scheduling). PP/DS previously required a separate SCM-APO system (Advanced Planning and Optimization, integrated in SAP Supply Chain Management).

In SAP S/4HANA it is now available as an integrated part of the system and is therefore even easier to use. PP/DS makes it possible to make particularly precise plans that would not be possible with the classic planning tools alone. This includes, for example, a precisely timed requirement planning, various planning heuristics, optimization procedures within the framework of detailed scheduling (minimization of set-up times, set-up costs, delay costs, alternative resource selection, etc.), as well as dynamic alert messages.

The area of SAP PP is therefore interesting for students of classical business administration as well as for (industrial) engineers. Production planning and Manufacturing is a complex field in which you have to react quickly to delivery bottlenecks, short stocks and changing customer requirements. In order for a company to remain efficient under highly competitive pressure, dates, materials and capacities must be planned safely, quickly and clearly, and the data processed accordingly.

## SAP PP CONSULTANT CERTIFICATION

After the „SAP Production Planning and Manufacturing with SAP S/4HANA“ module, you can take the official SAP consultant exam. If successful, the globally recognized SAP SE consultant certificate is awarded.

The exam is a computer-based multiple-choice test (duration: three hours) and can be taken online from the comfort of your own home. The exam date can be scheduled individually and carried out at any time of the day (even on weekends).

erp4students Course	Course at SAP Education
Introduction to Production Planning and Manufacturing with SAP S/4HANA	S4H00, S4200, S4220
Advanced Production Planning and Manufacturing with SAP S/4HANA	S4200, S4225
<b>SAP Exam: C_TS420</b>	

In this course, you will be introduced to the SAP S/4HANA software solution from SAP SE for production planning and control.

The course begins with an overview of SAP S/4HANA and a consideration of the technologies used there. Various planning strategies are then presented in detail. In addition to the theoretical introduction, there is a practical application of what has been learned on the SAP S/4HANA system based on the processing of case studies. The theoretical knowledge acquired is thus applied directly and thereby consolidated. The case studies are carried out on an SAP training system.

In the SAP S/4HANA system, you first create the master data of the required materials in order to then plan them using various strategies. You will then get to know the innovations that SAP S/4HANA Enterprise Management offers for the planning and analysis of planning results. You will also learn about requirements planning in SAP S/4HANA and apply it in practice. In the last part of the course, there is an introduction to PP/DS as a further component of SAP S/4HANA, which can also be used in the context of production planning and control as well as materials management.



### LEARNING TARGETS

After completing the course, you will be able to use the functions of the production planning and control area as well as large parts of the materials management area in an SAP S/4HANA system. You will learn to select planning strategies in the SAP S/4HANA system, to carry out requirements planning, to interpret and influence their results and to use selected functions and tools of advanced planning in PP/DS. As a result, you obtain special knowledge and skills in the following functional areas:

- Structure of SAP S/4HANA
- Demand Management in SAP S/4HANA
- SAP S/4HANA Enterprise Management
- Material Requirements Planning in SAP S/4HANA
- Integrated PP/DS in SAP S/4HANA

## STRUCTURE

- Introduction to the course and SAP S/4HANA
- SAP S/4HANA Enterprise Management and Additions
- Master Data of Production and PLM
- Planning Strategies for Demand Management
- Material Requirements Planning
- Advanced Planning with PP/DS



## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access, Microsoft Office recommended
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course
- Course Fee: 450 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS420 requires the content of the following consecutive courses and can be booked at [erp4students](http://erp4students) on special conditions:

- Introduction to Production Planning and Manufacturing with SAP S/4HANA
- Advanced Production Planning and Manufacturing with SAP S/4HANA

In this course, the software solution SAP S/4HANA from SAP SE is used for production planning and control. The knowledge you gained in the course „Introduction to Production Planning and Manufacturing with SAP S/4HANA“, which primarily focused on the area of production planning, is required here. This knowledge from the first course is taken up and deepened in the area of production control. During the course, you will put the theoretical content you initially acquired into practice by using integrated business processes on the living SAP system. This not only consolidates the learning content, but also the application competency that is so important in professional life.

After an initial overview of production control in SAP S/4HANA, the course gives a detailed insight into discrete manufacturing with production orders as well as process manufacturing. You will get to know all the functions required in practice for using production and process orders. You will also be introduced to repetitive manufacturing in SAP S/4HANA, which you will then carry out independently. The conclusion is a look at Lean Manufacturing and the Kanban process.



### LEARNING TARGETS

After completing the course, you will have in-depth, theoretical knowledge of production planning and control in the SAP S/4HANA system due to extensive descriptions of the individual planning elements in the area of production planning and control as well as manufacturing and its functions. You are able to use the functions of the production planning and control area as well as large parts of the manufacturing area in an SAP S/4HANA system. You are also able to carry out discrete manufacturing with production orders, process manufacturing, repetitive manufacturing, and the Kanban process in the SAP S/4HANA system. In particular, you will acquire knowledge and skills in the following functional areas:

- Discrete Manufacturing in SAP S/4HANA
- Process Manufacturing in SAP S/4HANA
- Repetitive Manufacturing in SAP S/4HANA
- Kanban / Lean Production in SAP S/4HANA

## STRUCTURE

- Introduction
- Discrete Manufacturing in SAP S/4HANA
- Process Manufacturing in SAP S/4HANA
- Repetitive Manufacturing in SAP S/4HANA
- Kanban / Lean Production in SAP S/4HANA



## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
  - For participants without knowledge of SAP PP we urgently suggest the previous or parallel participation in the course „Introduction to Production Planning and Manufacturing with SAP S/4HANA“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €
- SAP Exam Fee: 150 €
  - Note: Registration for the SAP certification exam requires participation in both SAP S/4HANA PP courses.

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_TS420 requires the content of the following consecutive courses and can be booked at [erp4students](#) on special conditions:

- Introduction to Production Planning and Manufacturing with SAP S/4HANA
- Advanced Production Planning and Manufacturing with SAP S/4HANA





**SAP ANALYTICS**

# **SAP BUSINESS WAREHOUSE (SAP BW/4HANA)**

# SAP BUSINESS WAREHOUSE WITH BW/4HANA (SAP BW/4HANA)

Since taking over Business Objects in 2007, SAP SE has been by far the largest player in the business warehouse sector. In 2011 this top dog position was cemented with the introduction of HANA. The core of SAP HANA consists of an in-memory database that uses the much faster accessible main memory of the computer for data storage - and not, as was previously the case, its hard drive. This enables higher performance, which is particularly noticeable when it comes to evaluating and processing large amounts of data. The development of HANA database technology therefore plays a decisive role, especially in the context of Big Data and Industry 4.0.

In particular, SAP Business Warehouse forms the basis for many analytical processes within everyday company life, for example in controlling or reporting - areas in which large amounts of data are generally juggled. Many companies are increasingly using BW applications in marketing, purchasing and/or sales, which means that the use of BW software is no longer reserved exclusively for upper management, but more and more employees in companies have to work with BW software).

With the targeted HANA migration of the SAP BW application to SAP BW/4HANA, decisive improvements in the areas of data storage, modeling and architecture can be achieved. Since corporate strategies are increasingly interlinked with the everyday processes of a company, BW/4HANA applications can specifically help to optimize processes and thus save costs and make operational processes more efficient.

Well-founded training and practical experience with SAP BW/4HANA gained during your studies will therefore impress most employers as a valuable addition to your skills and will undoubtedly significantly increase your chances when applying for a job.

## SAP BW/4HANA CONSULTANT CERTIFICATION

After the „SAP Business Warehouse with SAP BW/4HANA“ module, you can take the official SAP consultant exam. If successful, the globally recognized SAP SE consultant certificate is awarded.

The exam is a computer-based multiple-choice test (duration: three hours) and can be taken online from the comfort of your own home. The exam date can be scheduled individually and carried out at any time of the day (even on weekends).

erp4students Course	Course at SAP Education
SAP BW/4HANA - Dataflow and BusinessObjects Reporting	BW405, BW410
SAP BW/4HANA - Data Modeling and Business Objects Lumira	BW430, BW450
<b>SAP Exam: C_BW4HANA</b>	

The course introduces SAP's market leading Data Warehousing solution SAP BW/4HANA.

As a first step, the theoretical basics of the SAP BW/4HANA system are introduced. Connected to this theoretical introduction, the acquired knowledge is applied practically to a living SAP system by solving case studies. The case studies are performed in an SAP education system. It is based on the standard SAP ERP system and offers the corporate structure and the data basis to accomplish extensive analyses in the SAP BW system.

The participants learn how to work with the SAP BW/4HANA system using the user interfaces SAP GUI and SAP HANA Studio. The course consists of two parts:

In the first part, the basic setup of SAP BW/4HANA is introduced. Following this step, the data- and information structure in the BW system are illustrated and with the help of that, students are asked to independently work on a model scenario. One emphasis in this part is the modeling of dataflows within the BW-system (ETL-Process) and data acquisition from SAP source systems. Every chapter offers theoretical knowledge about a certain part of the BW system. The BW objects that are looked upon are then being introduced and illustrated. In addition to that, the native modeling capabilities of SAP HANA are introduced. The acquired knowledge is engrossed by working on case studies. Thus, students not only gather a profound overview on setup and functionality of the BW system and its integration with the SAP ERP system (or operative systems of third-party providers). They also gain respective practical experience in working with the software.

The second part of the course focuses on the analysis of data. First, the basics of creating reports (queries) using characteristics, key figures, hierarchies, and variables are presented and explained. Based on the data and structures that were generated by the course participants in the first part of the course, own reports and analyzes are created in the BW system. Additionally, students will perform analyzes in Excel-based SAP BusinessObjects Analysis as well as work with the Reporting Tool Crystal Reports Enterprise Edition.



### LEARNING TARGETS

After the course, students possess profound theoretical knowledge of the SAP BW/4HANA system, its technical aspects and the setup of the underlying data model, as well as approaches to define analyses and reports.

Course participants, in the end, are capable to orient themselves in an SAP BW/4HANA system. They will have acquired knowledge and skills in the following areas:

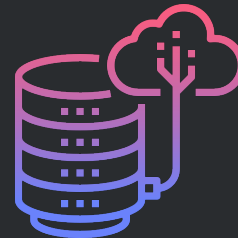
- Basics and Architecture of SAP HANA and SAP BW/4HANA
- Data Models and Data Structures in SAP BW/4HANA
- Data Acquisition and Dataflow in SAP BW/4HANA
- Administration of SAP BW/4HANA
- Native Modeling in SAP HANA
- Query Design in SAP BW/4HANA
- SAP BusinessObjects Analysis (Excel-Client)
- SAP BusinessObjects Crystal Reports Enterprise Edition

## STRUCTURE

- Part I: SAP BW/4HANA – Enterprise Data Warehousing
  - Basics of SAP HANA and SAP BW/4HANA
  - Data Models in SAP BW/4HANA (InfoObjects, InfoProvider)
  - Data Acquisition from SAP Source Systems
  - Dataflows in SAP BW/4HANA (Extraktion, Transformation, Loading)
  - Administration of Data Targets (InfoProvider Administration, Process Chains, Delta Merge)
  - Native Modeling in SAP HANA (Information Views)
- Part II: SAP BW/4HANA – Query Design and Reporting
  - Introduction to BEx Query Designer
  - Navigation in Queries
  - Key Figures
  - Characteristics
  - Structures
  - Hierarchies
  - Variables
  - Exceptions and Conditions
  - Report-to-Report-Interface
  - Administration of Query Objects
  - Query Performance Optimization
  - SAP BusinessObjects Analysis (Excel-Client)
  - SAP BusinessObjects Crystal Reports Enterprise Edition

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Microsoft Windows System (PC or Mac with VM: free version available)
  - Recommended: Microsoft Office
  - At least 2 GB free hard drive space
  - Internet access
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
- Course Certificate: Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €



Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_BW/4HANA requires the content of the following consecutive courses and can be booked at [erp4students](https://erp4students.com) on special conditions:

- SAP BW4/HANA – Dataflow and BusinessObjects Reporting
- SAP BW4/HANA – Data Modeling and BusinessObjects Lumira

The course deals with SAP's market leading Data Warehousing solution SAP BW/4HANA.

This course deals primarily with data acquisition and data modeling in SAP BW/4HANA. As a first step, the theoretical basics of the data acquisition and data modeling in SAP BW/4HANA are introduced in full detail. Connected to this theoretical introduction, the acquired knowledge is applied practically to a living SAP system by solving case studies. The case studies are performed in an SAP education system. The used IDES (Internet Demonstration and Evaluation System) represents a fully developed model enterprise. It is based on the standard SAP ERP system and offers the corporate structure and the data basis to accomplish extensive analyses in the SAP BW system. The participants learn how to work with the SAP BW/4HANA system using the user interfaces SAP GUI and SAP HANA Studio. In the area of application design, you will use SAP BusinessObjects Lumira to create own analytical applications.

The course consists of three parts:

In the first part of the course, you will deal with the various options for extracting data from different source systems into the SAP BW/4HANA system to make this data available to downstream processes and analyzes. Initially, the focus is on SAP's own source systems (e.g. SAP ERP) and the operational data provisioning (ODP) interfaces provided for this purpose. You will create your own DataSources in the SAP source system, replicate metadata in SAP BW and extract the data into SAP BW. In addition, the SAP HANA interfaces for data acquisition (Smart Data Integration, File) and real-time data acquisition will be presented. Then the focus will be on further data extraction methods and interfaces of the SAP BW/4HANA system. The file interface and other ODP contexts (SLT, ABAP CDS Views) and the embedded BW in SAP S/4HANA are presented and used here. Another aspect of data acquisition is delta management in SAP BW/4HANA, which is explained and used for the various data acquisition methods.

In the second part of the course, the participants deal with SAP's own enterprise data warehousing architecture for the implementation of SAP BW systems and projects: the LSA++ (Layered Scalable Architecture). Based on this, important aspects of SAP BW

projects are explained and a logical as well as BW model is created for an integrated scenario. Thereafter, the participants will deal with the Physical Modeling in SAP BW/4HANA. The previously developed logical models are transferred to InfoObjects, InfoProviders and Information Views. The focus here is on the optimal design of the data models to meet a given requirement.

In the third part of the course participants will build Analytical Applications on top of the previously created data models using the SAP BusinessObjects tool Lumira. Furthermore, Data Mining and Analysis capabilities of SAP BW are examined using HANA Analytical Processes.



### LEARNING TARGETS

After the course, students possess profound theoretical knowledge of the SAP BW/4HANA system, its technical aspects and the setup of the underlying data model, as well as approaches to define analyses and reports. Course participants, in the end, are capable to orient themselves in an SAP BW/4HANA system. They will have acquired knowledge and skills in the following areas:

- Data Acquisition from SAP Source Systems
- Data Acquisition in SAP HANA (File, Smart Data Integration, Local HANA DB Schema)
- Embedded BW in SAP S/4HANA
- ODP Contexts (SLT, ABAP CDS Views, ODP-type Information Views)
- File Interface
- Delta Management
- Real-Time Data Acquisition and Data Streaming
- Basics of Data Modeling
- Layered Scalable Architecture++
- SAP BW Projects and Logical Modeling
- Physical Modeling in SAP BW/4HANA and SAP HANA
- SAP HANA Analytical Process
- SAP BusinessObjects Lumira



## STRUCTURE

- Part I: SAP BW/4HANA – Data Acquisition
  - Data Acquisition with SAP BW Operational Data Provisioning
  - SAP HANA File Interface
  - SAP HANA Smart Data Integration (SDI)
  - Embedded BW in SAP S/4HANA
  - Further ODP Contexts (ABAP-CDS, System Landscape Transformation, ODP-type Information Views)
  - File Interface
  - Delta Management
  - Real-Time Data Acquisition and Data Streaming
- Part II: SAP BW/4HANA – Projects and Modeling
  - Basics of Data Modeling
  - Layered Scalable Architecture++
  - SAP BW Projects
  - Logical Model
  - BW Model
  - BI Content
  - Physical Modeling in SAP BW/4HANA
  - Physical Modeling in SAP HANA
  - Mixed Scenarios in SAP BW/4HANA
- Part III: SAP BW/4HANA – Application Design
  - SAP HANA Analytical Processes
  - SAP BusinessObjects Lumira

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Sprache: English, German
- System Requirements:
  - Microsoft Windows System (PC or Mac with VM: free version available)
  - Recommended: Microsoft Office
  - At least 4 GB free hard drive space
  - Internet access
- Other requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
  - For participants without knowledge of SAP BW we urgently suggest the previous or parallel participation in the course „SAP BW/4HANA - Dataflow and BusinessObjects Reporting“.
- Course Certificate: Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €
- SAP Exam Fee: 150 €
  - Note: Registration for the SAP certification exam requires participation in both SAP BW/4HANA courses.

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification called C\_BW/4HANA requires the content of the following consecutive courses and can be booked at [erp4students](#) on special conditions:

- SAP BW4/HANA – Dataflow and BusinessObjects Reporting
- SAP BW4/HANA – Data Modeling and BusinessObjects Lumira





**SAP ANALYTICS**

# **SAP ANALYTICS CLOUD (SAC)**

## SAP ANALYTICS CLOUD (SAC)

SAP Analytics Cloud (formerly SAP BusinessObjects Cloud) is SAP's cloud solution for data analysis and reporting. It consolidates a wide range of functions (discover, analyze, report, visualize, plan, forecast) and applications in a single and unified cloud-based platform and offers them to customers as Software-as-a-Service. The great strength of SAP Analytics Cloud is that it unifies traditionally separate applications into one platform, thereby combining processes of data modeling, reporting, visualization, and predictive analysis into an intuitive and importantly purpose-built analysis process, which is tailored to the experiences of business users (i.e., role-based).

With the SAP Analytics Cloud solution, SAP leases its customers dedicated tenants (isolated and secure) on a shared hardware-software platform. SAP manages the hardware and software so that customers do not have to perform any administrative tasks by themselves and can concentrate on using the respective analysis applications. This concept is also referred to as Software-as-a-Service (SaaS).

The cloud is natively based on the SAP Cloud Platform (SCP) and allows customers simplified and secure access to their own data and applications in their own tenant. As a SaaS solution, SAP Analytics Cloud combines analysis, planning, forecasting, and digital boardroom functions to enable customers to analyze all relevant business data in the cloud and/or on-premises. SAP Analytics Cloud can be a public or private SaaS that allows access to on-premises and cloud data sources.

SAP Analytics Cloud provides various analysis capabilities in a single cloud-based SAP solution that enables data analysts and decision makers to analyze, visualize, plan, and forecast in a secure and cloud-based environment. Based on these core capabilities, customers can automatically identify the key business drivers behind their core KPIs that impact customer success. In this way, business decisions across all business areas can be aligned to a single point of truth, and users can have a 360-degree view of all processes, operations, and business areas.

## SAP ANALYTICS CLOUD CONSULTANT CERTIFICATION

After the course „SAP Analytics Cloud (SAC) - Analysis, Planning, and Integration“, you can take the official SAP consultant exam. If successful, the globally recognized SAP SE consultant certificate is awarded.

The exam is a computer-based multiple-choice test (duration: three hours) and can be taken online from the comfort of your own home. The exam date can be scheduled individually and carried out at any time of the day (even on weekends).

erp4students Course	Course at SAP Education
SAP Analytics Cloud (SAC) - Analysis, Planning, and Integration	SACE11, SACS21, SACP21, SACP31
<b>SAP Exam: C_SAC</b>	

This course deals with the software solution SAP Analytics Cloud (SAC) from SAP SE. SAP SAC is used to carry out analyses, reporting, and planning.

The course focuses primarily on data modeling, data analysis, and business planning by using SAP Analytics Cloud and the integration of SAC with various data sources. First, the theoretical basics of data modeling, data analysis, planning, and source system integration in SAP Analytics Cloud are presented in detail. In addition to the theoretical introduction, what has been learned is applied by working on case studies directly on a living system. This way, the acquired theoretical knowledge is applied in practice and thereby strengthened.

The case studies are carried out on an SAP training system. The used data sets are based on the GBIS/4HANA system (Global Bike Inc.), which depicts a fully developed model company. The mapping is based on a standard SAP S/4HANA system and provides, among other things, the company structure as well as the data basis for carrying out extensive analyzes in the SAC system.

The participants learn how to use the SAC system by using the user interface based on Fiori UX technology.

The course consists of three parts:

In the first part of the course, you will deal with the creation of data models that serve as the basis for subsequent analysis and planning applications. In the first part of the course, the data is loaded into the model via the file interface from Excel files. You will use the data models created here and the data loaded into them to define your own SAC stories (analysis applications) and to analyze the data from different perspectives. The focus in this part of the course is on getting to know and using the numerous possibilities that SAC provides for data analysis and the creation of analytical applications. You will get to know the individual functions for tabular, graphical, and geographical analysis of data and apply them in the system. In addition, functions for sorting, filtering, formatting, and calculations are applied on these analyses. In addition, the first part of the course

introduces the use of SAP Analytics Cloud in conjunction with Microsoft Office and advanced methods for presenting and consuming data by using the SAC application Digital Boardroom. The first part is rounded off with an explanation of administrative tasks and functions in the SAC and the possibilities for users to collaborate on certain tasks in the SAC.

the planning application from SAC. A separate model is created again. Several planning applications are defined based on this model. This part of the course focuses on planning, forecasting, and data validation. Tasks in the second part of the course are the use of data tables in planning, mass data maintenance, performing what-if analyzes and value driver trees, creating forecast and planning versions, and using various data actions to automate connected data manipulation steps. Allocations in planning and the creation of planning processes are also discussed.

In the third part of the course, you will deal with the different possibilities of SAC when integrating with other SAP and non-SAP systems. This includes live data access to SAP BW and SAP S/4HANA as well as the use of data from non-SAP systems and SAP BusinessObject Universes.

**LEARNING TARGETS**  
Next Page >>>



## LEARNING TARGETS



After completing the course, you will have in-depth, theoretical knowledge of the SAC system, its technical aspects, the structure of the underlying data model, and the procedure for creating analytical applications and planning applications.

After completing the course, you will be able to orientate yourself in an SAC system. In particular, you have knowledge and skills in the following functional areas:

- Administration and Collaboration in SAC
- Data Modeling in SAC
- Use of SAC Applications (Stories, Analytics Designer, SAP Analysis for Microsoft Office, Digital Boardroom) for Data Analysis
- Use of SAC Applications (Versioning, Data Tables, Bulk Data Modification, Data Actions, What-if Analysis, Value Driver Trees, Allocations, Forecasts and Smart Predict, Planning Processes) for Planning and Forecasting
- Data Validation
- Data Locks
- Integration with SAP Source Systems (SAP BW, SAP S/4HANA, SAP BPC)
- Integration with non-SAP sources
- File Interface

INCREASE YOUR CAREER  
OPPORTUNITIES WITH AN  
SAP CONSULTANT CERTIFICATE  
AND GET A LITTLE  
CLOSER TO YOUR  
**DREAM JOB**



## STRUCTURE

- Part I: SAP Analytics Cloud – Data Modeling and Analysis With SAC
  - Navigation and Setting in SAP Analytics Cloud
  - Navigation in an SAC Application
  - Definition of Analysis Models in SAP Analytics Cloud
  - Definition and Use of SAC-Stories
  - Use of the Analytic Designer
  - Use of SAP Analysis for Microsoft Office
  - Use of Digital Boardroom
  - Administration and Collaboration in SAP Analytics Cloud
- Part II: SAP Analytics Cloud – Business Planning with SAC
  - Definition of Planning Models in SAP Analytics Cloud
  - Version Management
  - Data Tables and Bulk Data Change
  - What-If Analysis
  - Value Driver Trees
  - Forecasts and Smart Predict
  - Data Actions
  - Allocations
  - Planning Processes
  - Data Validation
  - Data Locks
- Part III: SAP Analytics Cloud – Integration of SAC with Data Sources
  - Integrated Planning Functions
  - Integration with SAP BW
  - Integration with SAP S/4HANA
  - Integration with SAP BPC
  - Analytical Applications and Integration of Microsoft Excel

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access
- Other Requirements:
  - For participants without knowledge of SAP S/4HANA we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
- Course Certificate: Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €
- SAP Exam Fee: 150 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

The official SAP consultant certification with the name C\_SAC requires the contents of the course:

- SAP Analytics Cloud (SAC) – Analysis, Planning, and Integration

The background of the slide features a photograph of three individuals—two men and one woman—collaborating at a computer. The image is partially obscured by large, semi-transparent geometric shapes in shades of teal, blue, and orange. A diagonal teal band across the upper right portion of the image contains the text "CONFIGURATION & PROGRAMMING" in white, bold, sans-serif capital letters.

**CONFIGURATION &  
PROGRAMMING**

# **SAP S/4HANA CUSTOMIZING**



SAP software products are delivered as standard software. This means that any on-premise software product that is to be implemented in a business has to be adjusted to the specific needs of the customer. This process is called Customizing.

During implementation of an SAP S/4HANA system, the software must be set in a way that mirrors the individual business processes of the company, as well as the company structure – meaning headquarters, branches, and affiliate companies. Often, during this process, existing software systems need to be altered or connected to the new ERP system; or individual software extensions have to be programmed (using ABAP), in order to fit the exact needs of the company. In other words, customizing is the process of adapting the SAP standard software to the requirements of a company by mapping organizational structures and processes of the company into the SAP system.

### Customizing with **erp4students**

Customizing is an essential part of the implementation process of any SAP system. In our two courses you will focus on customizing of the world-wide leading ERP system: SAP S/4HANA. As a student enrolled in the courses Introduction to SAP S/4HANA Customizing and Advanced SAP S/4HANA Customizing you will learn how to handle a complete, end-to-end customizing process. You will customize company structures as well as business processes across several modules and departments, mapping the exact needs of a model enterprise. You will thus experience a real-life business scenario of an SAP S/4HANA implementation and customizing process. The competencies you can gather in our SAP S/4HANA Customizing module are highly valuable and useful for future SAP consultants or IT project managers.

## SAP S/4HANA CUSTOMIZING CONSULTANT CERTIFICATION

There is no SAP Consultant Certification Exam available.

### **erp4students Course**

Introduction to SAP S/4HANA Customizing

Advanced SAP S/4HANA Customizing

**No SAP Exam available**

This course focuses on the Customizing of an Enterprise Resource Planning (ERP) system, using the world leading standard software SAP S/4HANA.

The course participants will be dealing with two implementation scenarios. In these scenarios, first, the organizational structures are implemented. Building upon that, cross-application business processes of different departments such as production, accounting/controlling and distribution/ logistics are modeled. The practically relevant case studies refer to the fields of organization- and processcustomizing which makes a cross-departmental view on individual business processes possible in the first place. The focus of process modeling in this course lies on the departments of production, accounting/ controlling and distribution/logistics.

The course also offers background information on project management regarding the implementation of standard software. This is also included in the case studies.

By practically working on the implementation of processes and their integration, the participants will develop a profound understanding of the complete implementation process as well as the interaction of organizational units, master data and process components. Thus, participants will be thoroughly prepared for their future role of project employees or end-users in the field of SAP S/4HANA.

The acquired skills can be further deepened in the course Advanced SAP S/4HANA Customizing.



### LEARNING TARGETS

After finishing the course, participants will have acquired a fundamental theoretical knowledge of the SAP S/4HANA system and especially on organization- and process-customizing of the SAP system. This is assured by the profoundly described process components and their integration in the SAP S/4HANA system. Participants will also be able to adapt to and orient themselves in any given SAP S/4HANA system. They will especially acquire skills concerning the concrete implementation of SAP S/4HANA software. A focus lies on the fields of production, accounting/controlling and distribution/logistics.

- Introduction and Configuration of SAP Fiori UX
- Introduction to the SAP S/4HANA Implementation Guide
- Customizing of the SAP S/4HANA Organizational Model
- Customizing of a Sales and Distribution Business Process in SAP S/4HANA
- Customizing of a Financial Accounting Business Process in SAP S/4HANA
- Customizing of a Controlling Process in SAP S/4HANA
- Customizing of a Manufacturing Process in SAP S/4HANA
- Case Study: Customizing of a comprehensive Business Scenario (self-contained work)
  - Customizing of the Organizational Model
  - Customizing of a complete Order-to-Cash Business Process
  - Test of Customized Business Process

## STRUCTURE

- Introduction to SAP S/4HANA and the Global Bike Company
- Introduction to the SAP S/4HANA Implementation Guide
- Business Scenario MEN Corp:
  - Customizing of the Organizational Model in SAP S/4HANA
  - Customizing of a Sales and Distribution Business Process in SAP S/4HANA
  - Customizing of a Financial Accounting Business Process in SAP S/4HANA
  - Customizing of a Manufacturing Process in SAP S/4HANA
  - Customizing of a Controlling Process in SAP S/4HANA
- Business Scenario WOMEN Corp (self-contained work) - Case Study: Customizing of a comprehensive Business Scenario

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Sprache: English, German
- Systemvoraussetzungen:
  - Computer (PC, Mac) with internet access
- Other Requirements:
  - For participants without knowledge of SAP ERP we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

An official SAP consultant certification in the area of SAP S/4HANA Customizing is not available.

This course deals with advanced Customizing techniques for the leading standard Enterprise Resource Planning solution – SAP S/4HANA. Based on an all-encompassing implementation scenario that you will carry out actively in the system, a wide range of SAP S/4HANA organizational units and the entire organizational structure of the company will be created in the SAP system. Furthermore, you will customize own master data and map a detailed business process in the system to accomplish an end-to-end business scenario spanning the following applications: Production, Accounting, Logistics/ Sales and Distribution, as well as Human Resources.

Additionally, you will become acquainted with the customizing of own reports in conjunction with a variety of tools provided by SAP S/4HANA. The case studies are completed by in-depth theoretical foundation on the SAP Implementation Guide (IMG) and IMG projects as well as the client concept, Change and Transport Management, as well as the authorization concept of SAP systems.



### LEARNING TARGETS

Based on the knowledge acquired in the course „Introduction to SAP S/4HANA Customizing“ you will apply advanced techniques in order to customize an End-to-End Business Process including detailed settings of a variety of process steps. The goal of this course is to provide students with in-depth knowledge of Customizing techniques in SAP S/4HANA, including:

- Client concept, Change and Transport Management
- Authorization concept of SAP Systems
- Maintaining and Managing own IMG Projects
- Customizing of the Organizational Model
- Customizing of Master Data
- Customizing of a detailed and all-encompassing End-to-End Business Process
- Error-handling and dealing with incomplete Customizing settings
- Customizing of own Reports

## STRUCTURE

- Theoretical foundation of Enterprise Applications, including:
  - Solution Manager
  - SAP NetWeaver
  - SAP S/4HANA
  - SAP Fiori UX
- SAP S/4HANA Implementation Guide
  - Client Concept, Change and Transport Management
  - Authorization Concept of SAP Systems
  - Maintaining and Managing own IMG Projects
  - Client-specific and Cross-client Customizing
- Customizing of the Organizational Model in SAP S/4HANA
- Customizing of Master Data in SAP S/4HANA
- Customizing of an integrated End-to-End Business Process in SAP S/4HANA, including:
  - Account assignment
  - Pricing
  - Order-to-Cash
  - Shop floor control
  - Material management
  - Procurement
  - Delivery
  - Billing and Payment
  - Profit Center Accounting and Profitability Analysis
  - Error handling and dealing with incomplete Customizing settings
- Customizing of Reporting Solutions in SAP S/4HANA, including:
  - Quick Viewer
  - SAP Queries and InfoSet Queries
  - Report Writer and Report Painter
- Enhancing your Customizing solution with a (relatively small) scenario which must be solved independently by the student.

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Language: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access (at least 700 MB free hard drive space)
- Other Requirements:
  - For participants without knowledge of SAP ERP we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
  - Participants without knowledge in SAP S/4HANA Customizing have to participate previously or in parallel in the course „Introduction to SAP S/4HANA Customizing“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

An official SAP consultant certification in the area of SAP S/4HANA Customizing is not available.

The background of the slide features a photograph of two individuals, a man and a woman, looking at a computer screen. The image is partially obscured by large, semi-transparent geometric shapes in shades of teal, blue, and orange. A diagonal band of teal color runs from the top right towards the center, containing the text 'CONFIGURATION & PROGRAMMING' in white, bold, uppercase letters.

**CONFIGURATION &  
PROGRAMMING**

# **SAP S/4HANA CUSTOMIZING**



# ABAP PROGRAMMING

Starting in the 1980's and undergoing a constant development ever since, ABAP is the basis for the entire SAP system today, being used for programming the SAP Application Server. Thus, this coding language makes it possible, on the one hand, to alter SAP products to an extent that allows every business to have a uniquely customized software product in the end. On the other hand, it is used to write whole new business applications. In the future, it will especially be used for InMemory- and on Demand technologies.

The language's syntax is comparable to COBOL but differs largely from other coding languages such as C, Java or Python. This is because ABAP is not a standardized language, which means that its one and only purpose is to be used in the SAP environment. Within this environment, however, ABAP has very powerful concepts for developing business applications, many of them specially designed for SAP ERP. Since the 1990's ABAP is also an objectoriented coding language. Today, when a new SAP system is implemented, customer needs are so unique and special that the usual customizing that can be done with the software often is not enough. New elements and add-ons have

to be programmed in order to reflect the company's unique business processes. Thus, ABAP is vital and essential within any implementation of a new SAP system.

Due to the large spectrum of possibilities with ABAP, the erp4students course is not designed to teach students every single commands of the language. The focus rather lies on dealing with practical problems within an SAP ERP system, to use specific tools of the integrated programming environment of SAP ERP, and to understand how the language is integrated into the system in its entirety. In the second course, participants focus on working with object-oriented concepts and adjusting SAP standard software to customer needs. They modify original code and develop browser-based application using Web Dynpro. The erp4students area of ABAP is especially aimed at students from Informatics. This is why the courses do not explain programming itself, but using ABAP as a new coding language. For this reason, participants must have knowledge of at least one other coding language to make sure, they can follow the contents.

## ABAP PROGRAMMING CONSULTANT CERTIFICATION

There is no SAP Consultant Certification Exam available.

erp4students Course	Course at SAP Education
Introduction to ABAP	BC100, SAPTEC, BC400, BC410, BC414, BC430, BC405
Advanced ABAP Programming	BC401, BC402, BC425, NET310, BC405
No SAP Exam available	

In this course, programming with the coding language ABAP is introduced and applied to the leading standard software in the field of Enterprise Resource Planning, SAP ERP.

As a first step, basic concepts of ABAP are explained, and methods of developing software for SAP ERP are introduced. Further contents of the course are ABAP's powerful Typeconcept, the modularization of programs, working with databases and especially the different possibilities of designing and customizing interfaces.

The contents are presented by using examples which have to be programmed by the participants directly on the system. Conclusively, the gained knowledge is further strengthened by solving a complex case study in a less guided way of teaching. An outlook on ABAP objects rounds off the course.



### LEARNING TARGETS

The course participants gain a basic knowledge of the coding language ABAP, its theoretical concepts and structure. They get to know the developing tools of the SAP ERP system and learn to use those for further software development.

After the course, students will be able to develop, maintain and advance software components in complex ERP environments. They will learn to handle complex problems and tasks, just like they could occur in a future job.

By working on the course, students will understand the process of developing software within an SAP ERP system. Due to the parallel work of several developers at the same time, this gains a special kind of complexity. Thus, course participants are being prepared for the practical use of ABAP as programmers, software engineers or in the context of different demanding tasks within an SAP ERP environment.

## STRUCTURE

- ABAP: Basic Concepts
- Data Dictionary
- Data Bases
- List Processing
- Interface Elements / Dynpros
- Case Study
- Outlook on ABAP Objects



## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 / 6 ECTS
- Sprache: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access
  - Microsoft Windows System (PC or Mac with VM: free versions available)
  - MS Internet Explorer
- Other Requirements:
  - All participants must have knowledge of at least one other object oriented coding language (e.g. Java).
  - For participants without knowledge of SAP ERP we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

An official SAP consultant certification in the area of ABAP Programming is not available.

In this course, advanced concepts of the coding language ABAP are introduced. In a first step, the necessary theoretical concepts of ABAP are laid out, followed by practical programming exercises on the living SAP system.

The programming exercises are performed on an SAP system for training purposes. In this system, a big amount of exemplary data is already integrated and can be used for the exercises. This way, own programs can be tested easily and without unnecessary and time-consuming effort. Aside from guided exercises, in which the fundamental workflow is practiced, there is a second form of case studies in which the students have to apply the concepts of the course independently.

In the course, the students will be confronted with three major topics:

- Getting to know object oriented concepts and their execution in ABAP; Intense practical application of the new knowledge by developing new programs and testing them in the SAP training system.
- Customizing of SAP standard products according to customer needs: Modification of original code from accessible dictionary elements as well as from elements of the programs' user interface by using different techniques.
- Developing modern browser-based applications by using Web Dynpro. Additionally, the course covers the following aspects: ALV Grid Control, Event Handling, Unicode and dynamic programming.



### LEARNING TARGETS

After the course, the participants will have gained theoretical knowledge as well as practical experiences concerning object oriented concepts of ABAP. Students will be able to develop object oriented programs and to customize existing SAP products according to customer needs. Most importantly, students will not only gain skills to solve the case studies of the course, but to choose and apply adequate methods to solve future problems independently. Additionally, participants will be able to develop internet-based applications by using Web Dynpro techniques. They will know ALV Grid Control, will be able to produce complex interfaces for their programs, have knowledge about Unicode and will have acquired practical skills in using methods of dynamic programming.

## STRUCTURE

- Part 1: Object oriented Programming with ABAP
  - Basics of object orientation
  - Inheritance, Casting and Interfaces
  - Object oriented Event Concept
  - Object oriented Repository Objects
  - Class-based Exceptions
  - Shared Objects
- Part 2: Customizing of SAP Standard Applications
  - Extension to Dictionary Elements
  - Customer Exits
  - Business Add Ins (BAdIs)
  - Modifications
  - New Extension Possibilities
- Part 3: Web-based Application with Web Dynpros
  - Basics of Web Dynpro Techniques
  - Controller
  - Context
  - Interface Definition
  - Programming of the Application Logic
  - Internationalisation
- Part 4: Further Concepts
  - ALV Grid Control and Event Processing
  - Unicode
  - Dynamic Programming

## IMPORTANT INFORMATION IN BRIEF

- Total Workload:
  - 180 hours / 6 ECTS
- Sprache: English, German
- System Requirements:
  - Computer (PC, Mac) with internet access (at least 700 MB free hard drive space)
  - Microsoft Windows System (PC or Mac with VM: free versions available)
  - MS Internet Explorer
- Other Requirements:
  - All participants must have knowledge of at least one other object oriented coding language (e.g. Java).
  - For participants without knowledge of SAP ERP we urgently suggest the previous or parallel participation in the course „Enterprise Resource Planning with SAP S/4HANA (TS410)“.
  - For participants without knowledge of ABAP, we urgently suggest to first take the course Introduction to ABAP.
- Duration: ca. 4 months
- Course Certificate:
  - Certificate by Brandenburg University of Applied Sciences when all case studies are completed successfully during the course.
- Course Fee: 450 €

Upon successful completion of the course, you will receive the certificate from the Brandenburg University of Applied Sciences.

An official SAP consultant certification in the area of ABAP Programming is not available.

## ABOUT US

With the digitization of society, today hardly any business process is conceivable without IT support. It is therefore important to understand that business application systems are information systems for people and not programs for computers. Solutions must be found that orchestrate the interaction of processes, organizations, and end users. For this reason, we attach great importance in our courses to imparting the appropriate skills that enable the practical solution of business processes with today's complex IT solutions. In addition to a wellfounded theoretical understanding we attach great importance to practical transfer in our course design - through intensive direct work on real IT systems, as they occur everywhere in everyday business. Theory and practice thus support each other and build up lasting knowledge and competence, which enable successful learning and facilitate a career entry later on.

erp4students is a study program that is designed and developed to be carried out alongside studies and apprenticeship and has been offered exclusively to students and apprentices since 2006. erp4students offers students and apprentices the opportunity to deal intensively with the topic of Enterprise Resource Planning and other SAP areas next to their studies or apprenticeships and to build up corresponding skills. This gives the course participants a clear competitive advantage on the job market over other graduates. In order to practically deepen the learned, theoretical basics of a course, participants work online on a living SAP system while participating in the course. The

erp4students program includes a variety of courses, each of which focuses on different aspects of SAP SE products. The base of our course offering is the course Enterprise Resource Planning with SAP S/4HANA (TS410). Seven further sub-areas build up on this course:

- » SAP BW/4HANA
- » SAP Analytics Cloud (SAC)
- » SAP S/4HANA FI
- » SAP S/4HANA CO
- » SAP S/4HANA MM
- » SAP S/4HANA SD
- » SAP S/4HANA PPS
- » SAP S/4HANA Customizing
- » ABAP Programming

The Brandenburg University of Applied Sciences (THB) is one of the first universities to use SAP software in teaching. Prof. Robert Franz (picture) worked for several years at SAP as a development manager (focusing on training, development, and sales) before moving to the THB in 2004. At the



THB he is a professor for Business Applications in Computer Science in the economics department. Prof. Franz's chair has implemented several innovative projects in the SAP environment in recent years, such as:

- for 18 years the Berlin-Brandenburg SAP-Forum,
- SAP Next-Gen project with the grid company Berlin-Brandenburg (NBB),
- student teams at InnoJams at TechEd in Berlin, Madrid and eBIT in Hannover, and
- global train-the-trainer courses in Greece, Turkey, VAE, Saudi-Arabia, Spain, and Hungary.

In the spring semester of 2006, the „trial run“ of the first SAP course by erp4students took place - and with great success! erp4students has been successively expanded by now. Currently, students from all over the world can take part in the courses. The range of courses has grown to 16 courses and is offered in German and English language. To date, tens of thousands of students have been able to obtain an SAP certification thanks to erp4students.

The aim of the Brandenburg University of Applied Sciences (THB) is to bundle the competencies of the erp4students team and the THB, and to achieve synergy effects that bring both sides even further forward and from which students - and you as a prospect course participant - ultimately benefit.



## COOPERATION WITH SAP UNIVERSITY ALLIANCES & SAP NEXT-GEN

The Brandenburg University of Applied Sciences (THB) has been working in close partnership with the SAP University Alliances (SAP UA) and SAP Next-Gen for more than 20 years. Immediately after the initiation of the erp4students project, SAP UA was enthusiastic about the idea of developing an e-learning offer regarding SAP topics and which is specifically for students. When the necessary agreements were made and erp4students was launched, SAP UA soon declared it as a pilot project in order to emphasize the exclusive status of the project. In the meantime, SAP UA has made erp4students its strategic online partner for academic teaching, from which a wide variety of parties benefit.

The clear focus that the program management sets is to offer students and apprentices the best possible

SAP training that they can get alongside their studies or apprenticeship. The aim must be to make it easier for the participants to start their careers by providing them with certificates in SAP topics, thereby significantly increasing their career opportunities. And all of this - due to the cooperation with SAP UA and SAP Next-Gen - at particularly favorable and student- and apprentice-friendly conditions that can't be found anywhere else for non-students and non-apprentices.

**SAP**  
**University** **SAPnext-gen»**  
**Alliances**

## CONTACT

In case you have any further questions, or you want inquire in detail about a course or the program in general, we are happy to help you. You are welcome to visit our website, send us an email or call us directly.



**Program Manager:**  
**Pouyan Khatami, Dipl. Wirt.-Inf.**

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