

IT Assistants



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Introduction

- Our course
- Some of us already completed an apprenticeship
- Age gap students up to 9y
- full-time course aiming to reach:
 - Entrance Certificate for Universities of Applied Sciences
 - Professional basic skills in IT



Definition - dual education

- known as VET
- specific training that combines practical and theoretical experience
- training in a company and school
- better transition from the school life into working life



About dual education

- Most of the time in the company
- Between 2 and 3 years
- Working time:
 - Adults 48 hours per week
 - Minors 40 hours per week
- Practical experience comes from the company
- The school part takes place on:
 - 1 or 2 days of the week
 - Or in blocks last up to 3 weeks



Differences

full-time study	Dual system of education
<ul style="list-style-type: none">• focuses on study content• more available time• university careers are becoming more transparent for students• part-time students have the same student status as full-time students• eligible for student loans because of professional part at school	<ul style="list-style-type: none">• not entitled to student loans• combination of work and school• less time for more learning material• more practical tasks• profit from practical experience in company• monthly salary from company



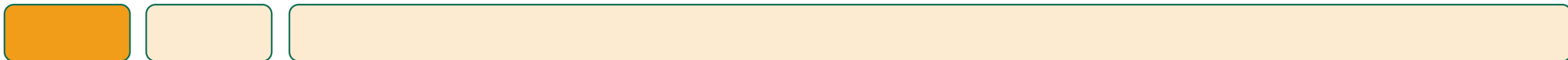
Prerequisites for IT Assistant Course (full-time)

School requirements

- General Certificate of Secondary Education
- Eligibility to take A-levels

Personal requirements

- Interest in IT





Registration Process

Online Registration

- pre-register on www.schüleronline.de

Manuel Registration

- use the pre-register sheet
- fill out a document containing questions
- prove measles vaccination

Frage zur Anmeldung

Beantworten Sie die Fragen handschriftlich in zusammenhängenden Sätzen.

_____ Datum: _____

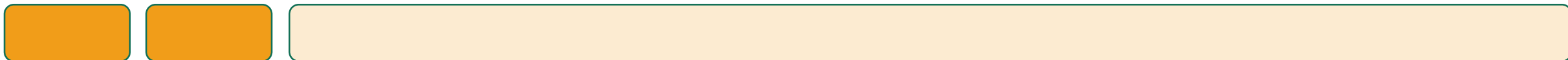
q: _____

Perzentil berufswunsch: _____

Wann haben Sie sich für diesen Bildungsgang entschieden?

Warum meinen Sie, dass Sie für diese berufliche Fachrichtung geeignet sind?
(Wirtschaft/Verwaltung; Technik; Informatik; Gesundheit/Soziales; Ernährung/Hauswirtschaft)

Was haben Sie bereits unternommen bzw. werden Sie unternehmen, um Ihre schulischen Ziele zu erreichen? (Antwort für die Höhere Handelsschule bitte auf **Englisch!**)



Dokumentation
über die Vorlage von Nachweisen
nach § 20 Absatz 9 Infektionsschutzgesetz (IfSG)

Name, Vorname: _____

Geburtsdatum: _____

Nachweispflicht erfüllt:

Nachweis wurde vorgelegt am _____ als

- Impfausweis („Impfpass“)
- Anlage zum Untersuchungsheft
- Ärztliches Zeugnis über ausreichenden Impfschutz
- Ärztliches Zeugnis, dass eine Immunität vorliegt
- Ärztliches Zeugnis, dass aufgrund einer medizinischen Kontraindikation nicht geimpft werden kann.

Angabe zur Kontraindikation: Es liegt eine dauerhafte Kontraindikation vor.

Bitte beachten Sie: Sofern eine zeitlich befristete Kontraindikation vorliegt (z.B. aufgrund einer akuten Erkrankung), ist die Nachweispflicht nicht erfüllt.

- Bestätigung einer staatlichen Stelle oder der Leitung einer anderen Einrichtung im Sinne von § 20 Absatz 8 Satz 1 IfSG darüber, dass ein Nachweis bereits vorgelegen hat und zwar des/der _____

(Name und Adresse dieser Stelle/Einrichtung)

Nachweispflicht nicht erfüllt:

- Es wurde kein Nachweis bis zum _____ vorgelegt.
- Impfschutz gegen Masern ist erst zu einem späteren Zeitpunkt möglich bzw. kann erst später vervollständigt werden (z.B. bei vorübergehender Kontraindikation aufgrund von Krankheit).
- Eine Benachrichtigung des zuständigen Gesundheitsamts erfolgte daher am _____

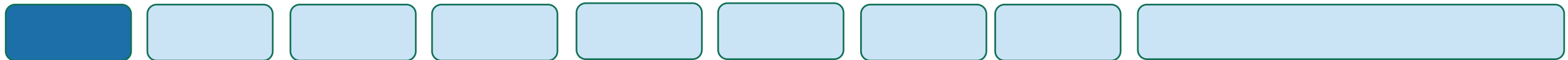
Dokument nicht interpretierbar:

- Vorgelegtes Dokument kann nicht interpretiert werden.
Die Weiterleitung einer Kopie an das zuständige Gesundheitsamt erfolgte daher am _____



Contents of the training

- IT-related subjects
- General subjects
- Internship Periods
- Final examination



Subject-related



Databases



Software
Development



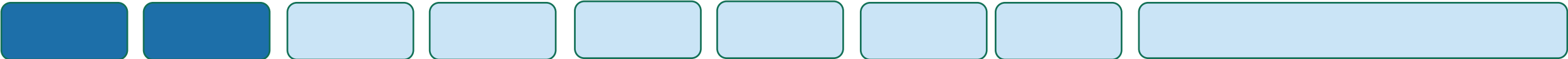
Operating
Systems



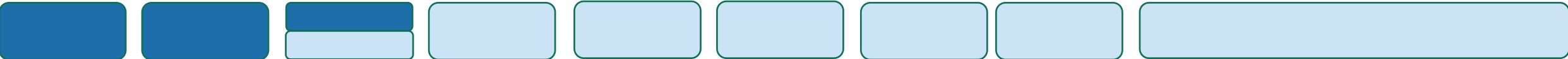
Project
Management



Electrical
Engineering

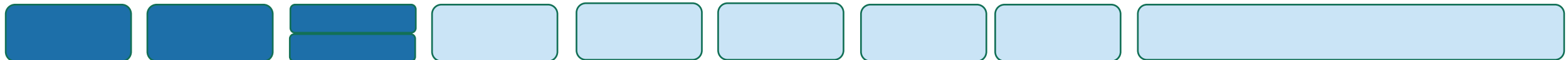


Databases



Databases

Year 1	Year 2	Year 3
<ul style="list-style-type: none">• Development• Implementation	<ul style="list-style-type: none">• SQL Commands• Create SQL Scripts• PL/SQL• Generalization	<ul style="list-style-type: none">• SQL-Trigger• Create and manage Users• Rights and distribution of roles

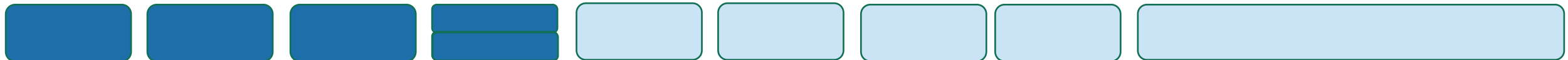


Software Development



Software Development

Year 1	Year 2	Year 3
<ul style="list-style-type: none">• Get to know QT• QT(C++ basics)	<ul style="list-style-type: none">• QT (2D Games in C++)• Microsoft Office 365<ul style="list-style-type: none">○ Lists○ Power Automate○ PowerApps	PowerShell



Operating Systems

Year 1	Year 2	Year 3
<ul style="list-style-type: none">• Computer Hardware• Network configuration	<ul style="list-style-type: none">• Windows• IPv6• Firewalls• Linux	<ul style="list-style-type: none">• DNS• DDNS• LDAP• Windows/ Linux Server• Active directory• Planning of a customer network



Project Management

Year 1	Year 2	Year 3
<ul style="list-style-type: none">• procedure models• project charter• UML• user-case diagram	<ul style="list-style-type: none">• specifications• task List• functional Specification• specification of obligations	<ul style="list-style-type: none">• project plans using in MS Projects• deliverables• project structure plan• class diagram



Electrical Engineering

Year 1	Year 2	Year 3
<ul style="list-style-type: none">• Resistance• Diodes• Transistors• Capacitors	<ul style="list-style-type: none">• Calculation of resistance networks• Voltage generation• Types of sensors• measurement technology• three-phase current	<ul style="list-style-type: none">• working with electronic systems• tests and analysis of electro-technical tasks• development of professional solutions



General subjects

Economics

Politics

Math

German

English

Sports



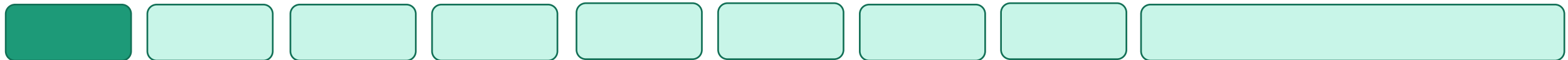
Final examination

- Exams:
 - To obtain Entrance Certificate for Universities of Applied Sciences
 - Math
 - German
 - English
 - professional skills
 - Programming
 - Databases
 - Operating Systems/Networks



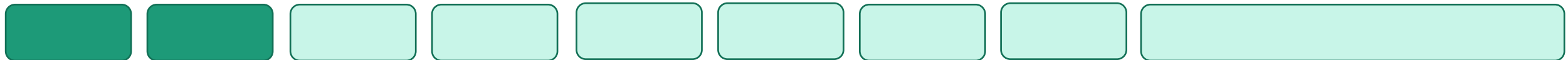
Possibilities after graduation

- IT assistants
- Fields of work
- University Study
- Standard subjects
- specializations



IT assistants

- have basic IT skills --> good basis for university
- have less experience in a company than students from dual education
- do not specialize in a special subject but have overview of many fields of IT
- get good knowledge to start in the IT-World



Fields of work



Application
development



Web
developer



System
Integrator



System
Administrator

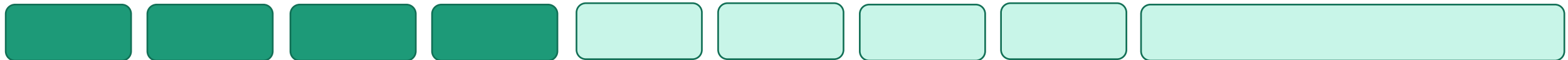


Database
Administrator



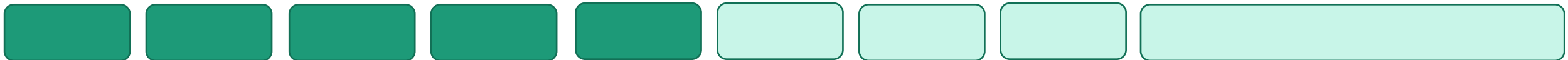
University Study

- More than 27 fields of study
- Computer science as basis
- Wide-ranging from the most important areas



Standard subjects

- Math and Physics
- Computer architecture
- Information Technology
- Programming languages
- Software engineering
- Operating systems
- Embedded systems
- Networks and databases
- Graphic data processing.



Specializations

- Data Science
- Geo-informatics
- Information and communication technology
- Artificial intelligence
- Media informatics
- Technical computer Science



- Business Informatics,
- Applied computer science
- Bioinformatics
- Computational engineering,
- Computer visual artist,
- Digital engineering,
- Games engineering,
- Profit formatting,



- Engineering informatics,
- IT forensics,
- Human computer interation,
- Mobile computing,
- Software engineering,
- Socioinformatics,
- Systems engineering
- Environmental informatics
- Administrative informatics



END

