Interested in **computers** and in **programming**? Want to know how your favorite computer game is produced, how Instagram is programmed and what Artificial Intelligence really is? Good at **English** too?

Then you should come to our CSI Class . Here you´ll learn all of this and much more. The next level quality qualification in computer science together with a great education in Math, English and German will get you into a great position in one of the most attractive labor markets available .

Join us and enjoy the unique atmosphere while studying with international classmates.

Admission

If you attend an Austrian school, you´ll need to bring the **semester report card** of the 4th-grade lower secondary school. Additionally, we will conduct an **interview** with you to learn more about your motivation for attending this international class. For the exact application period, please refer to our website.

If you come from abroad, we´d ask you to write an e-mail to **csi@htl-leonding.ac.at** and tell us where you come from and which school you´re currently attending. Please attach a scanned copy of your most recent school report/report card.







German Language Support Program

Since you might want to take the standardized Austrian Reife- und Diplomprüfung Examination, we will especially take care of bringing your German skills up to speed during the first school years too.

Therefore, our CSI students attend an additional German course (German as a Foreign Language with a special focus on communication skills) during their first year.

Diploma

Upon completing this college, you will receive an Austrian Reife- und Diplomprüfungszeugnis (School Leaving Certificate and Diploma Certificate) which grants general university admission for Austrian universities and universities of applied sciences.

Moreover, this certificate is very well accepted by all IT companies in Austria and enables you to work as a software engineer in any software company.

Contact

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V/03



HTL Leonding
next level

Computer Science International

Learn to code. So you can tame AI.

5 – year education with certification

- Informatik
- Medientechnik
- Elektronik - Technische Informatik
- Medizintechnik

Overview Curriculum

	semester					
	1./2.	3./4.	5./6.	7./8.	9./10.	
compulsory subjects and compulsory exercises	**hours per week**					**total**
A. Compulsory subjects						
Ethics and Religious Education	2	2	2	2	2	**10**
German	3	2	2	2	2	**11**
English	2	2	2	2	2	**10**
Geography, History, Political Education	2	2	2	2	-	**8**
Sports	2	2	2	1	1	**8**
Applied Mathematics	4	3	3	2	2	**14**
Science	3	3	2	2	-	**10**
B. Technical Subjects						
Computer Architecture a. Operating Systems	3(2)	2	-	-	-	**5**
Programming and Software Engineering	5(3)	6(3)	5(2)	5(2)	4	**25**
Databases and Information Systems	2(2)	2(2)	3(2)	3(2)	2	**12**
Network Systems & Cyber Security	-	2(1)	3(1)	2(1)	2	**9**
Web Programming and Mobile Computing	-	2(1)	2(2)	2(1)	2	**8**
Data Science und Artificial Intelligence	-	-	-	2	2	**4**
Business Administration and Management	4	4	4	3	3	**18**
Systems Planning and Project Development	-	-	3	6(3)	7(5)	**16**
C. Compulsory Exercises						
Social and Personal Competence	1(1)	1(1)	-	-	-	**2**
Individual Learning Support	3	2	2	2	2	**11**
Total number of weekly hours per week	**36**	**37**	**37**	**38**	**33**	**170**
compulsory internship						

Remarks: x(y) means: x hours, of which y are practical hours.
Compulsory internship: at least 8 weeks in the non-teaching period before entering the 5th year

Description of Technical Subjects

POSE – Programming and Software Engineering
This is our real focus in computer science. You´ll literally learn everything about programming, from the basics to running really large systems like online shops, booking systems, micros services etc. Additionally, you´ll learn about the most important frameworks to develop large information systems.

DBI – Databases and Information Systems
This is another important topic at our college. You´ll learn how to develop data models for specific applications, i .e., depending on the application you´ll learn how to organize data storage in an optimal way and you´ll learn to work with the most important database systems.

NSCS – Network Systems and Cyber Security
Here we´ll work on your skills to build and maintain networks. You´ll get to know the components a network consists of (e.g., cables, routers, switches, etc.) and how large networks and cloud services are built. Obviously, these systems must be secured from hacker attacks. You´ll learn all about this too.

WMC – Web Programming and Mobile Computing
From Instagram to Amazon. Nearly every modern computer software is running in your browser or on a mobile phone. So, we´ll spend a decent amount of time to learn how to design and implement web sites, how to implement web apps and, of course, how to develop mobile apps.

DSAI – Data Science und Artificial Intelligence
How can programs identify people's faces in images, what technology is behind Siri, Alexa & Co., how can robots do their jobs without any help from humans, how can NPCs in computer games behave in such an intelligent way? The answer: they all learn from data from the past. Here you´ll really get to know various AI systems and how to build these for different applications.

SYP – System Planning and Project Development
Writing software is a team sport. But what needs to be done if 5, 10, or more developers work on one piece of software? How do you get the right information from your customers to understand what they really want? This and much more is what this subject is all about.

BWM – Business Administration and Management
No matter whether you want to found your own enterprise after school or work in a big company, it is very important to understand how businesses work, what their internal procedures are like, how they are organized internally, etc. You´ll learn all of this and will have the chance to get to know the largest enterprise software in the market. You can experiment with it freely because we are the only school in Austria which has this software installed.

CABS – Computer Architecture and Operating Systems
When becoming a good software engineer, it is, of course, necessary to know how a computer is assembled. For getting the real basics we´ll also roll up our sleeves and show you how to use a soldering iron. Furthermore, you´ll learn how operating systems (i.e., Windows, macOS, Linux, etc.) really work and how they are actually designed and implemented.

You will be offered a varied and exciting training!



