



TOEGEPASTE INFORMATICA

TOEGEPASTE  
INFORMATICA

**howest**  
we develop people

## BACHELOR - BRUGGE Campus Rijselstraat

Gefascineerd door een wereld die meer en meer digitaal wordt? Toegepaste Informatica biedt de ideale opleiding om een brede waaier aan IT-competenties te verwerven. Je wordt opgeleid tot een innoverende en veelzijdige informaticus met specialisatie full stack-web ontwikkeling, secure software development, web & mobile native apps, blockchain architectuur en development, digitalisering van bedrijfsprocessen (ERP, CRM, WMS & MES), cybercrime, web- en netwerk pentesten, forensische analyse, malware analyse en reverse engineering. Je maakt kennis met Big Data, IoT en IT-wetgeving (GDPR).

**Bovenop een stevige basis IT, kies je vanaf het tweede jaar topics uit een keuzetraject:**

- **ICT & Blockchain Consultant:** je adviseert bedrijven bij het implementeren van de nieuwste technologieën
- **Software & Systems Engineer:** je ontwikkelt web, mobiele cloud en IoT oplossingen
- **Computer & Cyber Crime Professional:** je organiseert de cybersecurity en rekt af met cybercrime

### Je komt terecht in volgende beroepen

Informaticus is een knelpuntberoep. Tal van jobkansen dus, zoals: Web & Mobile Developer, Full-Stack Developer, Backend Developer, Business Intelligence Consultant, Network & Systems Engineer, Forensics Expert, Penetration Tester, Risk & Security Consultant, IT Consultant, ERP Consultant, Data Privacy Officer, Blockchain Consultant, ...

### Troeven

Je kan zowel in een grote multinational als een kleine KMO functioneren. Veel studenten komen uit andere provincies bij ons studeren. Niet enkel voor onze unieke keuzetrajecten, vele praktijkprojecten en werkcolleges op maat, maar ook omdat we de reputatie hebben bij het werkveld om een kwalitatief diploma af te leveren.



**Tip:** voor onze andere opleidingen binnen **Design & technologie** neem een kijkje op **howest.be**



**Volg ons op facebook**  
[www.facebook.com/HowestTI](https://www.facebook.com/HowestTI)

#### Meer info:

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2018-2019

# ICT & BLOCKCHAIN CONSULTANT

**NIEUW!**

	SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4	SEMESTER 5	SEMESTER 6
ICT INFRA-STRUCTURE	/ Desktop and mobile operating systems (3 SP) / Hardware (3 SP)	/ Computer networks (6 SP)		/ Server operating systems concepts (3 SP)		/ Internship (18 SP) / Bachelor thesis (9 SP) / Seminars, study visits and challenges (3 SP)
INFORMATION MANAGEMENT	/ Databases (3 SP)	/ Analysis and modeling techniques (3 SP)	/ Information modeling (3 SP) / Advanced SQL and information exchange (3 SP)	/ Big data, business intelligence and NoSQL (3 SP)	/ Document and Knowledge Management (3 SP)	
SOFTWARE DEVELOPMENT	/ Problem solving (3 SP) / Software development 1 (6 SP)	/ Software development 2 (6 SP)	/ Secure object oriented architectures (6 SP) / Blockchain architecture (2 SP)	/ .NET Technology (3 SP) / Blockchain development and smart contracting (2 SP)	/ Decentralised apps (3 SP)	
ICT MANAGEMENT	/ Digital economy (2 SP) / Digital business management (2 SP) / Process management (2 SP)	/ Project Management (2 SP) / Project Communication (3 SP)	/ Statistics and decision making (4 SP) / Privacy and IT law (2 SP)	/ Supply chain / ERP (4 SP) / CRM (2 SP)	/ IT governance (2 SP) / IT entrepreneurship (2 SP) / Professional communication (2 SP)	
WEB AND MOBILE	/ Web development (6 SP)	/ Server-side scripting and responsive design (4 SP) / Web pentesting (2 SP)	/ Java web technology and blockchain development (3 SP) / User experience design (2 SP) / Digital marketing (2 SP)	/ Mobile web apps (2 SP) / Smart devices (2 SP)		
CYBERCRIME & SECURITY					/ Security management, threat and risk assessment (3 SP)	
IT SOLUTIONS				/ ICT strategy and planning (3 SP) / Software implementation and change management (3 SP)	/ Business Process Modeling and Software (2 SP) / WMS/MES (2 SP) / Advanced ERP (2 SP)	
PROJECTS		/ Programming project (4 SP)	/ Project (3 SP)	/ International project (3 SP)	/ Consultancy project (6 SP) / International communication (3 SP)	

2018-2019

## SOFTWARE &amp; SYSTEMS ENGINEER

	SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4	SEMESTER 5	SEMESTER 6
ICT INFRASTRUCTURE	<ul style="list-style-type: none"> <li>/ Desktop and mobile operating systems (3 SP)</li> <li>/ Hardware (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Computer networks (6 SP)</li> </ul>		<ul style="list-style-type: none"> <li>/ Server operating systems concepts (3 SP)</li> <li>/ Windows Server lab (3 SP)</li> <li>/ Linux Server lab (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ VMWare and Cloud Computing (3 SP)</li> <li>/ Windows and Linux Server advanced (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Internship (18 SP)</li> <li>/ Bachelor thesis (9 SP)</li> <li>/ Seminars, study visits and challenges (3 SP)</li> </ul>
INFORMATION MANAGEMENT	<ul style="list-style-type: none"> <li>/ Databases (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Analysis and modeling techniques (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Information modeling (3 SP)</li> <li>/ Advanced SQL and information exchange (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Big data, business intelligence and NoSQL (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ CMS (3 SP)</li> </ul>	
SOFTWARE DEVELOPMENT	<ul style="list-style-type: none"> <li>/ Problem solving (3SP)</li> <li>/ Software development 1 (6SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Software development 2 (6SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Secure object oriented architectures (6 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ .NET Technology (6 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Foundation .NET (3 SP)</li> </ul>	
ICT MANAGEMENT	<ul style="list-style-type: none"> <li>/ Digital economy (2 SP)</li> <li>/ Digital business management (2 SP)</li> <li>/ Process management (2 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Project Management (2 SP)</li> <li>/ Project Communication (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Statistics and decision making (4 SP)</li> <li>/ Privacy and IT law (2 SP)</li> </ul>		<ul style="list-style-type: none"> <li>/ IT governance (2 SP)</li> <li>/ IT entrepreneurship (2 SP)</li> <li>/ Professional communication (2 SP)</li> </ul>	
WEB AND MOBILE	<ul style="list-style-type: none"> <li>/ Web development (6 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Server-side scripting and responsive design (4 SP)</li> <li>/ Web pentesting (2 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Java web technology (3 SP)</li> <li>/ Advanced JavaScript (2 SP)</li> <li>/ Advanced web Topics (2 SP)</li> <li>/ User experience design (2 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Advanced server web (2 SP)</li> <li>/ Mobile web apps (3 SP)</li> <li>/ Native mobile apps (2 SP)</li> <li>/ Smart devices (2 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Frameworks (2 SP)</li> <li>/ Cloud development (2 SP)</li> <li>/ Internet of things (2 SP)</li> </ul>	
PROJECTS		<ul style="list-style-type: none"> <li>/ Programming project (4 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Project (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ International project (3 SP)</li> </ul>	<ul style="list-style-type: none"> <li>/ Programming project (6 SP)</li> </ul>	

2018-2019

# COMPUTER & CYBER CRIME PROFESSIONAL

UNIEK!

	SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4	SEMESTER 5	SEMESTER 6
ICT INFRASTRUCTURE	/ Hardware and Desktop Operating Systems (6 SP)	/ Computer networks (6 SP)		/ Server operating systems concepts (3 SP) / Windows Server lab (3 SP) / Linux Server lab (3 SP)	/ VMware, cloud computing and security (3 SP) / Windows and Linux Server Security (3 SP)	/ Internship (19SP) / Bachelor thesis (8 SP) / Seminars, study visits and challenges (3 SP)
INFORMATION MANAGEMENT	/ Databases (3 SP)	/ Analysis and modeling techniques (3 SP)	/ Information modeling (3 SP) / Advanced SQL and information exchange (3 SP)	/ Forensic analysis (3 SP)	/ Cryptography (3 SP)	
SOFTWARE DEVELOPMENT	/ Problem solving (3SP) / Software development 1 (6SP)	/ Software development 2 (6SP)	/ Secure object oriented architectures (6 SP)	/ .NET Technology (3 SP)		
ICT MANAGEMENT	/ Digital economy (2 SP) / Digital business management (2 SP) / Process management (2 SP)	/ Project Management (2 SP) / Project Communication (3 SP)	/ Statistics and decision making (4 SP) / Privacy and IT law (2 SP)		/ IT governance (2 SP) / IT entrepreneurship (2 SP) / Professional communication (2 SP)	
WEB AND MOBILE	/ Web development (6 SP)	/ Server-side scripting and responsive design (4 SP) / Web pentesting (2 SP)		/ Mobile web apps and security (3 SP)		
CYBERCRIME & SECURITY			/ Java web technology (3 SP) / Advanced JavaScript (2 SP) / Web security and Honeypot (4 SP)	/ Cybercrime (3 SP) / Practical reverse engineering and malware analysis (3 SP) / Network and systems pentesting (3 SP)	/ Network and CCNA security (3 SP) / Security management, threat and risk assessment (3 SP) / Emergent Security Techniques (3 SP)	
PROJECTS		/ Programming project (4 SP)	/ Project (3 SP)	/ International project (3 SP)	/ Security Project (6 SP)	