howest
university of applied sciences

ANTICIPATING THE FUTURE

HOWEST FACTS AND FIGURES

- **PROGRAMMES**
- / 25 professional bachelor degrees
- / 12 associate degrees
- / 10 degrees entirely in English
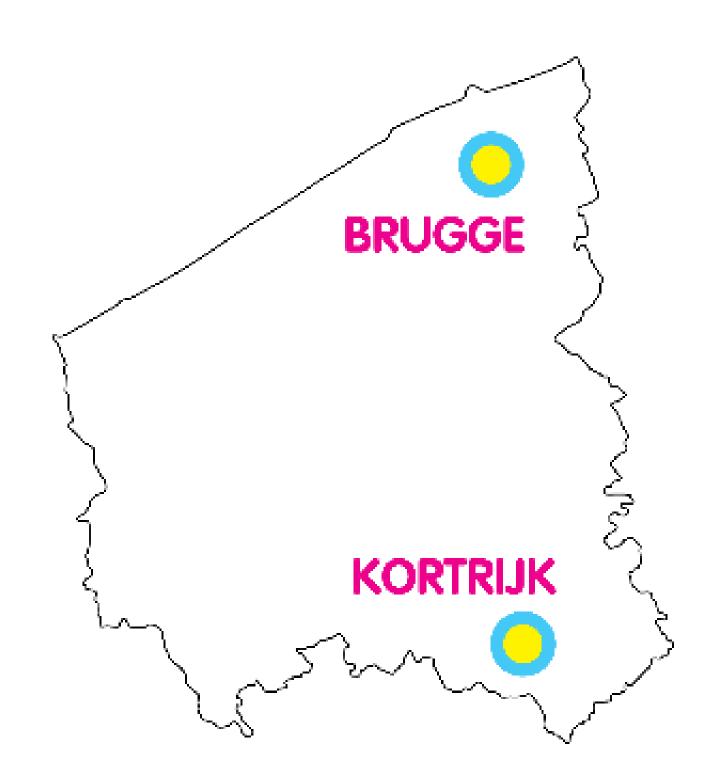- / 23 English-taught semesters (exchange)

- **PEOPLE**
- / ± 9,000 students
- / ± 800 FTE employees
- / ± 1,900 degrees/year
- / 35% brain gain from outside province of West Flanders

HOWEST FACTS AND FIGURES

- Campuses in Brugge (3) and Kortrijk (3)

- Central Administration in Kortrijk

- Public funded: €5000/ student/ year

- €7,5 mio/ year turnover from Research and Services, in a competitive market

- Tuition fee for EER students: ± €1.000 / year

- https://www.howest.be/en/study/study-at-howest/educational-organization

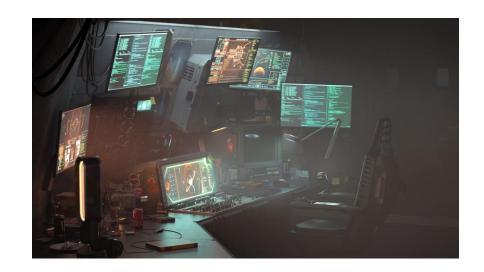- All degree programmes fully accredited by NVAO, the Dutch-Flemish Accreditation Organisation

BRUGGE

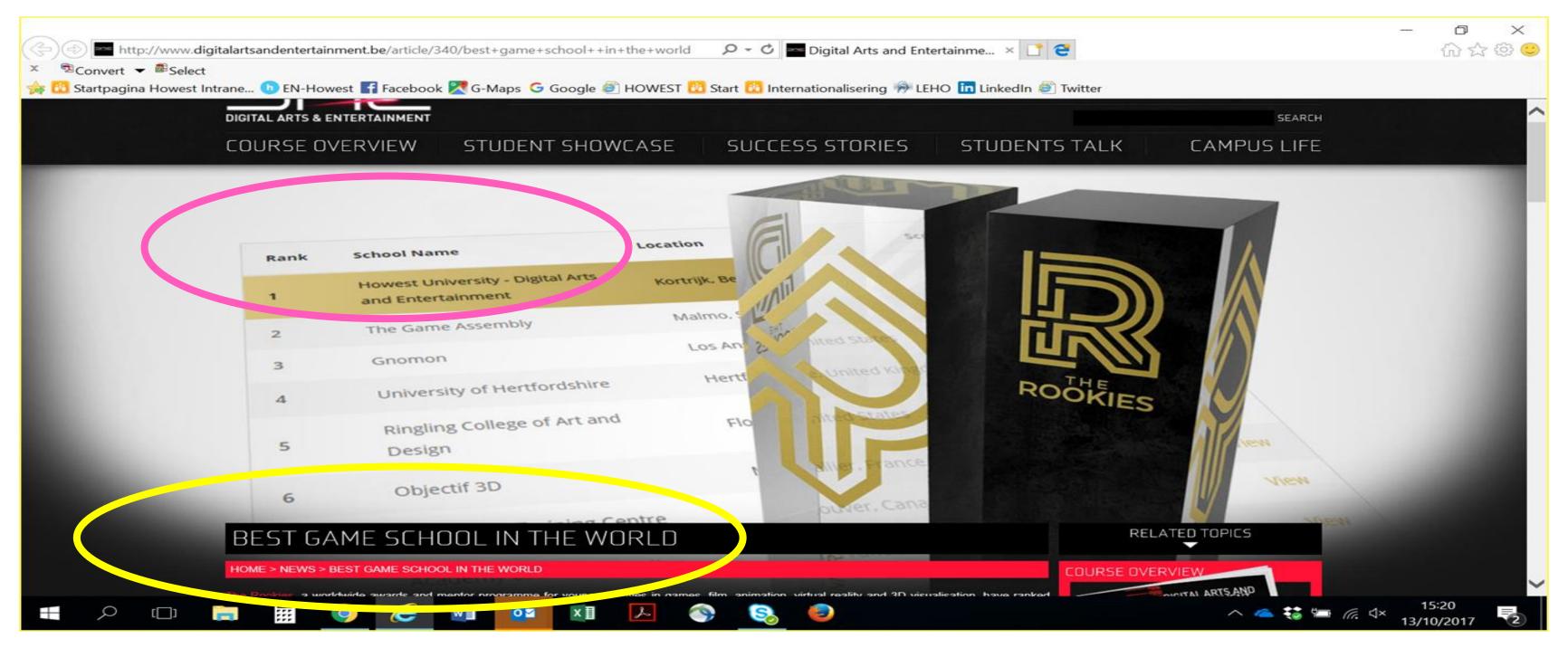KORTRIJK

11 PROGRAMMES FULLY IN ENGLISH

- Bachelor of Digital Arts and Entertainment – DAE (3y - 180 ects)
  - major Visual Effects (VFX)
  - major 3D Animation
  - major Game Graphics Production
  - major Game Development
  - major Independent Game Production
  - major Interactive Sound Production

- Bachelor of Digital Design and Development – Devine (3y - 180 ects)

- Bachelor of Applied Computer Science – major Cyber Security (3y - 180 ects)

- Bachelor of Industrial Product Design (3 years – 180 ects)

- Bachelor of Creative Technologies and Artificial Intelligence
  - Short track - year – 60 ECTS
  - Long track – 3 years – 180 ECTS

- Advanced Bachelor of Bioinformatics (1 year– 60 ects)

- Postgraduate Certificate in Cyber Security (1 year – 56 ects)

- Postgraduate Certificate in Global Business Management (30/60 ECTS)

- Postgraduate Certificate in Migration and Refugees (30/60 ECTS)

- Postgraduate Certificate in Psychological Dimensions of Gender and Diversity (30 ECTS)

- European Master in Sustainable Energy System Management (1.5 years / 1 semester @Howest)

DAE #1 GAME DEVELOPMENT PROGRAMME IN THE WORLD IN 2021 - 2018 - 2017

Autumn – Howest Bruges - 9 programmes

23 ENGLISH – TAUGHT SEMESTERS FOR EXCHANGE STUDY

- Applied Computer Science Autumn
- Applied Health & Lifestyle Sciences
- Bioinformatics I
- Global Business Management I
- Integrated Building Design & Construction
- Migration and Refugees (Social Work)
- Nursing Programme
- We teach the world (teacher training)
- Psychological Dimensions of Gender & Diversity

23 ENGLISH – TAUGHT SEMESTERS FOR EXCHANGE STUDY

Autumn – Howest Kortrijk - 6 programmes

- AI Engineer

- Collaborative Design Studio

- Digital Arts and Entertainment

- Digital Design and Development

- Journalism, Project Management & Storytelling

- Tourism, Project Management & Storytelling

23 ENGLISH – TAUGHT SEMESTERS FOR EXCHANGE STUDY

Spring – Howest Bruges - 4 programmes

- Applied Computer Science Spring
- Bioinformatics II
- Global Business Management II
- Nursing Programme

Spring – Howest Kortrijk - 4 programmes

- Creative Communication Project
- Design for Identity
- Digital Arts and Entertainment
- Digital Design and Development

STUDYING IN THE HEART OF EUROPE

BRUGES
UNESCO WORLD HERITAGE

CAMPUSES IN BRUGES

KORTRIJK

UNESCO

CREATIVE CITY

CAMPUSES IN KORTRIJK

Security Summer Camp 2023

HOWEST
IN A NUTSHELL

43 postgraduate certificates
25 bachelor's programmes
23 English-taught semesters
12 associate degrees
1 European master's

howest?

....

multiple student startups

....

Accredited by **NVAO**

....

#howestvibe

....

±9.000 students

....

1.907 degrees a year

....

180 international academic partnerships

....

800 employees

....

member of Ghent University Association

international students coming from **84** countries

+ €7.5 million a year on research and innovation

CYBER SECURITY PROFESSIONAL
2022 - 2023

Category	SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4 🌐	SEMESTER 5 🌐	SEMESTER 6 🌐
ICT INFRA-STRUCTURE	Hardware and Operating Systems	Communication Networks	Operating Systems Concepts	Server System Management #Windows Server Lab #Linux Server Lab	Datacenter Technology and Security	Internship
INFORMATION MANAGEMENT			Information Modeling #Information Exchange		Windows and Linux Server Security	
	Databases	Application Prototyping	Webpentesting Advanced	.NET Technology Essentials	Network Infrastructure Security	
SOFTWARE DEVELOPMENT	Problem Solving #Cryptography Fundamentals	Object Oriented Programming	Object Oriented Architectures and Development #n-tier Architectures #Secure Development	Network and System Pentesting #Ethical Hacker	Security Management Threat and Risk Assessment #ISO 2700x #NIST	
	Programming Fundamentals			Forensic Analysis	Cryptography and Blockchain #Blockchain #Ransomware #Quantum Cryptography	
WEB & MOBILE		Web, Mobile and Security #Server-side Scripting #Responsive Design #Web Pentesting	Data Analytics	Practical Reverse Engineering and Malware Analysis #Advanced Persistent Threat (APT)		
ICT MANAGEMENT	Web Development		Web Technology, Security and Honeypot	Cybercrime	Emergent Security Techniques #5G #Cyber Warfare #Industrial Security #Machine Learning	Bachelor Thesis
AI						
IT SOLUTIONS		Project Communication		Mobile Security #Multi-Factor Auth #Biometric Auth #Password Managers	IT Governance #IT Governance #Cobit 2019	
CYBERCRIME & SECURITY	E-business	Programming Project #Project Management		Data Privacy and IT Law #GDPR #NIS	Security Project	
PROJECTS, INTERNSHIP & THESIS	Cyber Security Fundamentals		Analysis and Development Project #Analysis and Business Case #IT Entrepreneurship #Technical Writing	International Project		Professional Networking

Security Summer Camp 2023

In the summer of 2023 Howest will host the 9th edition of the Security Summer Camp. Students from participating schools will gather in Bruges for a week of intensive training and real-life exercises in **Reverse Malware Engineering**, **Security management**, **Forensics**, **Communications Security**, **Pentesting** and Capture the Flag.

https://www.howest.be/en/events/security-summer-camp

➢ From Monday 26 June 2023 at 08:00u

➢ Till Friday 30 June 2023 at 18:00u

howest
university of applied sciences

Security Summer Camp 2023: Blended

	20/06/2022	21/06/2022
09:00	Kickoff Security Summer Camp 2022	CyberSec in EU-panel discussion
09:30	Getting to know each other	CyberSec in EU-panel discussion
10:30	Getting to know each other	Start To Phish
11:30	Cultural differences	Start To Phish
12:30	LUNCH	
13:30	Getting ready for Belgium (installing and configuring software)	Cybercrime
14:30	Getting ready for Belgium (installing and configuring software)	Cybercrime
15:30	Getting ready for Belgium (installing and configuring software)	Malware basic
16:30	Getting ready for Belgium (installing and configuring software)	Malware basic

howest
university of applied sciences

Security Summer Camp 2023: On-site

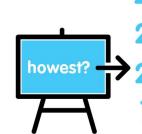|	Monday	Tuesday	Wednesday	Thursday	Friday
08:30	Registration	Penetration testing / Wireless attacks	Cryptography	CTF	CTF
09:30	Kickoff session	Penetration testing / Wireless attacks	Cryptography	CTF	CTF
10:30	Visit Westtoer	Penetration testing / Wireless attacks	Workshop on threat intelligence, network security, OSInt and Dark Web	CTF	CTF
11:30	How to write a security report	Penetration testing / Wireless attacks	Workshop on threat intelligence, network security, OSInt and Dark Web	CTF	AWARD CEREMONY
12:30	LUNCH				
13:30	IT Governance and Privacy	Threat intelligence, network security, OSInt and Dark Web	writing report & prepare presentation	CTF	
14:30	IT Governance and Privacy	Threat intelligence, network security, OSInt and Dark Web	writing report & prepare presentation	CTF	
15:30	Forensic analysis	Threat intelligence, network security, OSInt and Dark Web	Presentation	CTF	
16:30	Forensic analysis	Threat intelligence, network security, OSInt and Dark Web	Presentation	CTF	

howest
university of applied sciences

AI Summer Camp 2023

Gene Vangampelaere

HOWEST
IN A NUTSHELL

43 postgraduate certificates
25 bachelor's programmes
23 English-taught semesters
12 associate degrees
1 European master's

howest?

....

multiple student startups

....

Accredited by **NVAO**

....

#howestvibe

....

±9.000 students

....

1.907 degrees a year

....

180 international academic partnerships

....

800 employees

....

member of Ghent University Association

international students coming from **84** countries

+ €7.5 million a year on research and innovation

Categories (left column):
- ICT INFRA-STRUCTURE
- INFORMATION MANAGEMENT
- SOFTWARE DEVELOPMENT
- WEB & MOBILE
- ICT MANAGEMENT
- AI
- IT SOLUTIONS
- CYBERCRIME & SECURITY
- PROJECTS, INTERNSHIP & THESIS
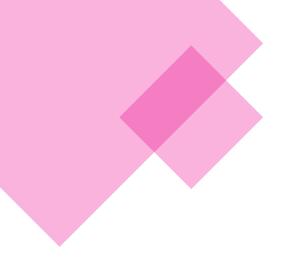
SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4 🌐	SEMESTER 5 🌐	SEMESTER 6 🌐
Hardware and Operating Systems	Communication Networks	Operating Systems Concepts	Data Collection and Preprocessing	Knowledge and Workflow Management	Internship
Databases	Application Prototyping	Information Modeling #Information Exchange	AR Fundamentals and Development		
Problem Solving #Cryptography Fundamentals	Object Oriented Programming	Database Advanced #Advanced SQL #NoSQL	Machine Learning #supervised learning #unsupervised learning	Cloud and Edge Computing #Amazon #IBM Watson #Google	
Programming Fundamentals		Object Oriented Architectures and Development #n-tier Architectures #Secure Development		AI Ethics	
	Web, Mobile and Security #Server-side Scripting #Responsive Design #Web Pentesting		Neural Networks and Deep Learning #computer vision #natural language processing	Business Process Modeling and Blockchain Solutions	
Web Development		AI Fundamentals			
		Data Analytics	Mobile and Smart Technology	Cryptography	Bachelor Thesis
	Project Communication	Blockchain Architecture and Development	Blockchain Development and Smart Contracting	IT Governance #IT Governance #Cobit 2019	
E-business	Programming Project #Project Management	Analysis and Development Project #Analysis and Business Case #IT Entrepreneurship #Technical Writing	Data Privacy and IT Law #GDPR #NIS	AI Project	
Cyber Security Fundamentals			International Project		Professional Networking

AI Summer camp 2023

In the summer of 2023 Howest will host the first edition of the AI Summer Camp. Students from participating schools will gather in Bruges for a week of intensive training and real-life exercises in Machine Learning, Deep Learning, Data Processing and some exciting social activities.

https://www.howest.be/en/events/ai-summer-camp

➢ From Monday 26 June 2023 at 08:00u

➢ Till Friday 30 June 2023 at 18:00u

howest
university of applied sciences

AI Summer Camp 2023: Blended

	Monday 19/06/2023	Tuesday 20/06/2023
08:30		Data Preprocessing
09:30	Kickoff AI Summer Camp 2023	Data Preprocessing
10:00	Getting to know session	Break
	Getting to know session	Data Preprocessing
11:30	Dutch for dummies	Data Preprocessing
12:30	LUNCH	
13:30	Python for AI	Data Visualization
14:30	Python for AI	Data Visualization
	Break	Break
15:30	Python for AI	Data Visualization
16:30	Python for AI	Data Visualization

howest
university of applied sciences

AI Summer Camp 2023: on-site

	Monday 26/06/2023	Tuesday 27/06/2023	Wednesday 28/06/2023	Thursday 29/06/2023	Friday 30/06/2023
09:00	Machine Learning (regression)	Machine Learning (unsupervised learning)	Deep Learning	Deep Learning (computer vision)	The Future of AI
09:30	Machine Learning (regression)	Machine Learning (unsupervised learning)	Deep Learning	Deep Learning (computer vision)	The Future of AI
11:00	Machine Learning (regression)	Machine Learning (unsupervised learning)	Deep Learning	Deep Learning (computer vision)	The Future of AI
12:00	Machine Learning (regression)	Machine Learning (unsupervised learning)	Deep Learning	Deep Learning (computer vision)	The Future of AI
12:30	LUNCH at DaD				
13:30	Machine Learning (regression)	AI Ethics	social activity	Deep Learning (NLP)	
14:30	Machine Learning (regression)	AI Ethics	social activity	Deep Learning (NLP)	
15:30	Machine Learning (regression)	Low code platforms	social activity	Deep Learning (NLP)	
16:30	Machine Learning (regression)	Low code platforms	social activity	Deep Learning (NLP)	

howest
university of applied sciences

What do we need?

- At least 15 students from 3 different EU partners send with SBM Erasmus grant.
  - 3 ECTS
  - Staff members can join with STT grant
  - Short-term blended mobility grant
- Staff members that are willing to deliver an online/offline workshop.

howest
university of applied sciences

![howest hogeschool]

Bachelor in Creative Technologies & Artificial Intelligence

https://www.howest.be/en/programmes/bachelor/creative-technologies-and-artificial-intelligence

Basic Dutch (choice)	3 SP

MLOps (choice)	6 SP

Advanced AI	6 SP

Meeting Flanders Today (choice)	3 SP

Deep Learning (choice)	6 SP

AI For Healthcare (choice)	6 SP

Internship	24 SP

AI Engineer Essentials	6 SP

Machine Learning	6 SP

Research Project	6 SP

● Analysis ● Code ● Connect ● Design ● Integrate ● International

howest
university of applied sciences

howest
hogeschool
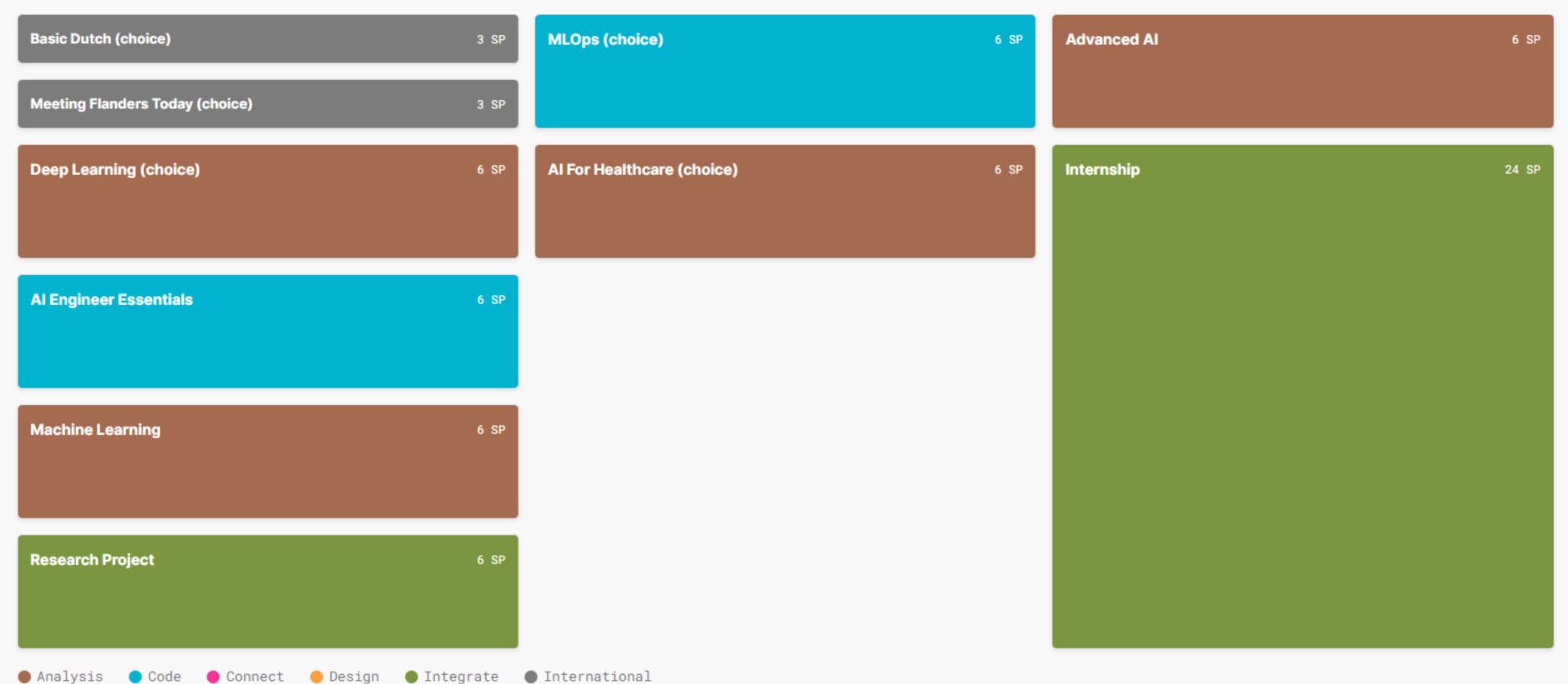
A mind is like a parachute
it doesn't work unless it's open
— **Frank Zappa**