

EIT Health M.Sc. Health and Medical Data Analytics

FAU Erlangen-Nürnberg, Universidad Politécnica de Madrid,
Universidade de Lisboa, Université Grenoble Alpes

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EIT HEALTH

The **future**
of healthcare
in **Europe**

Europe

future

EIT Health

healthcare



EIT Health at a glance

EIT Health – Mission

- Promote entrepreneurship and develop innovations in healthy living and active ageing
- Enable citizens to live healthier and more productive lives by delivering products, services and concepts that improve quality of life
- Offer a strong, diverse and balanced partnership of best-in-class organisations in education, research, technology, business creation, corporate and social innovation
- Foster cooperation and unlock Europe's innovation and growth potential

EIT Health: facts & figures

- **6** Co-location Centres (CLCs): London (UK/Ireland), Stockholm (Scandinavia), Barcelona (Spain), Paris (France), Mannheim and Heidelberg (Germany/Switzerland), Rotterdam (Belgium/Netherlands)
- **7** InnoStars regions in 6 countries: Croatia, Hungary, Poland, Portugal, Italy, Wales
- **51** core partners: universities, industry, research and general public
- **More than 80** associate partners

EIT Health – objectives

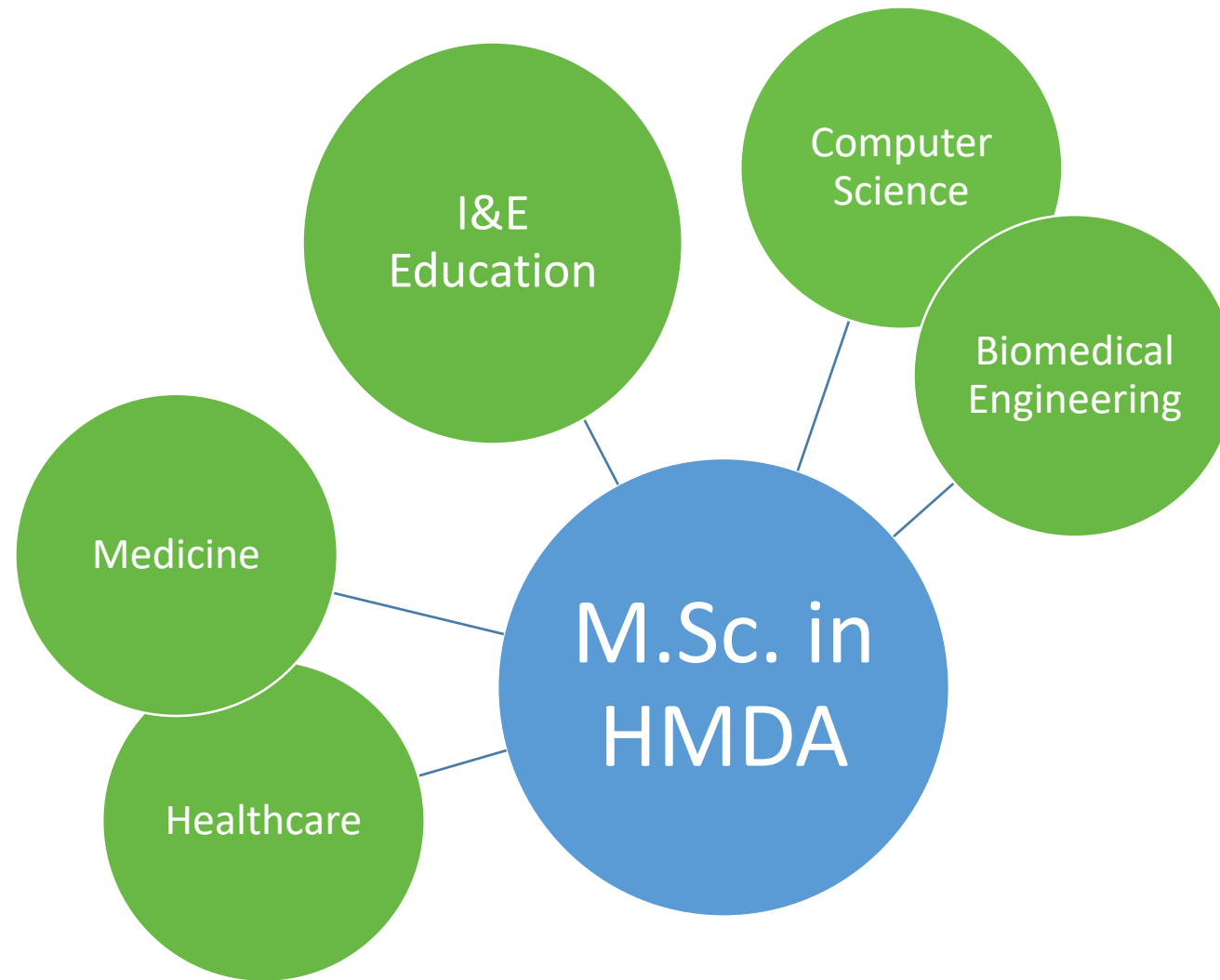
- **Promote healthy living:** foster self-management solutions in healthcare and motivate active personal lifestyles
- **Support active ageing:** enable mobility and independence throughout life; overcome age-related functional loss
- **Improve healthcare:** improve healthcare systems as well as treatment and management of chronic diseases, e.g. with personalized healthcare solutions

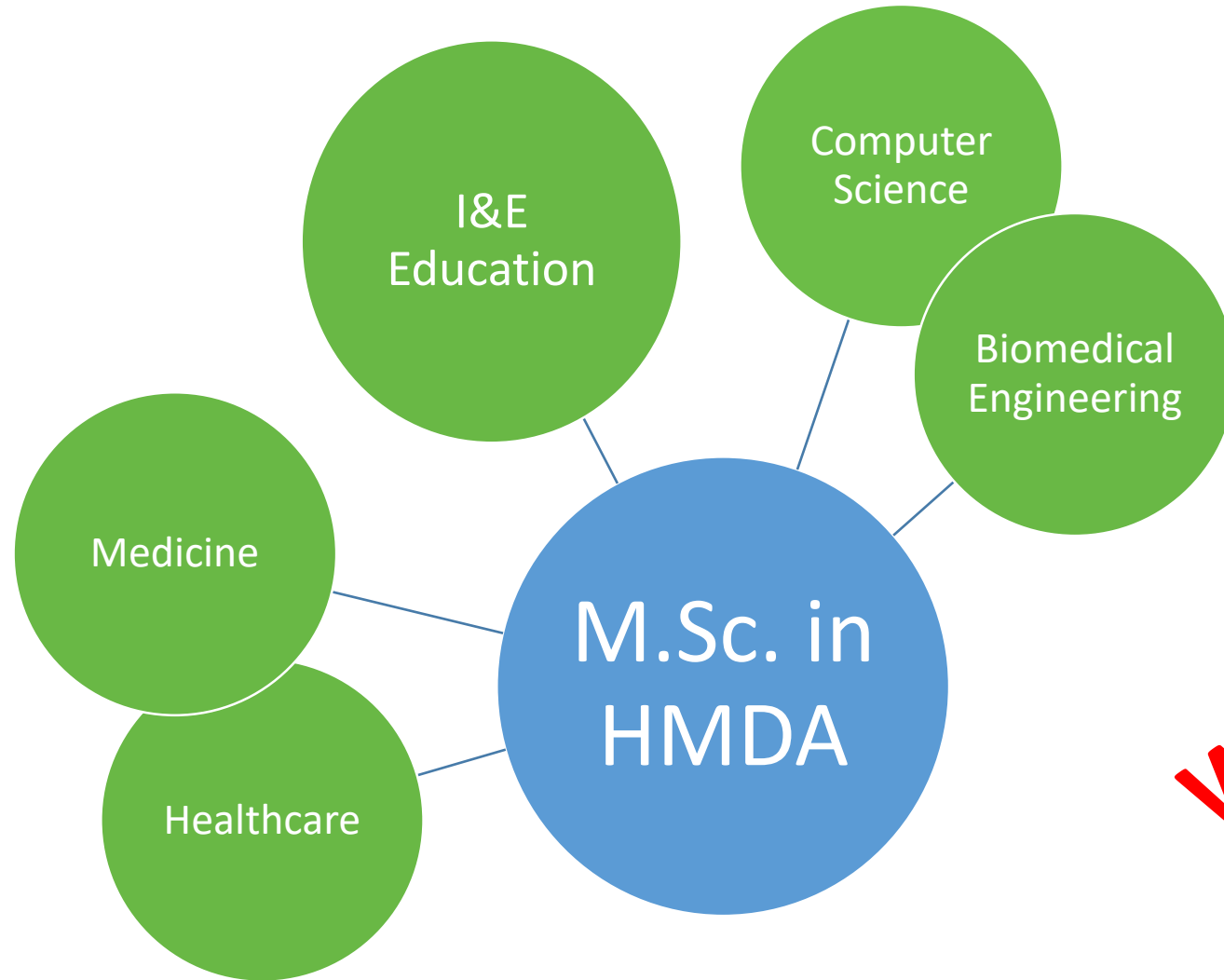
EIT Health – specific tools

- **EIT Health Innovation Projects:** spur innovation by building on multidisciplinary collaboration
- **EIT Health Accelerator:** offer support and services for companies to accelerate their innovation processes
- **EIT Health Campus:** create a new brand for excellence in education

EIT Health: goals & figures

- Launch **19** new products and services
- Incubate approx. **70** new business ideas
- Offer more than **150,000** students the opportunity to take part in educational online programmes

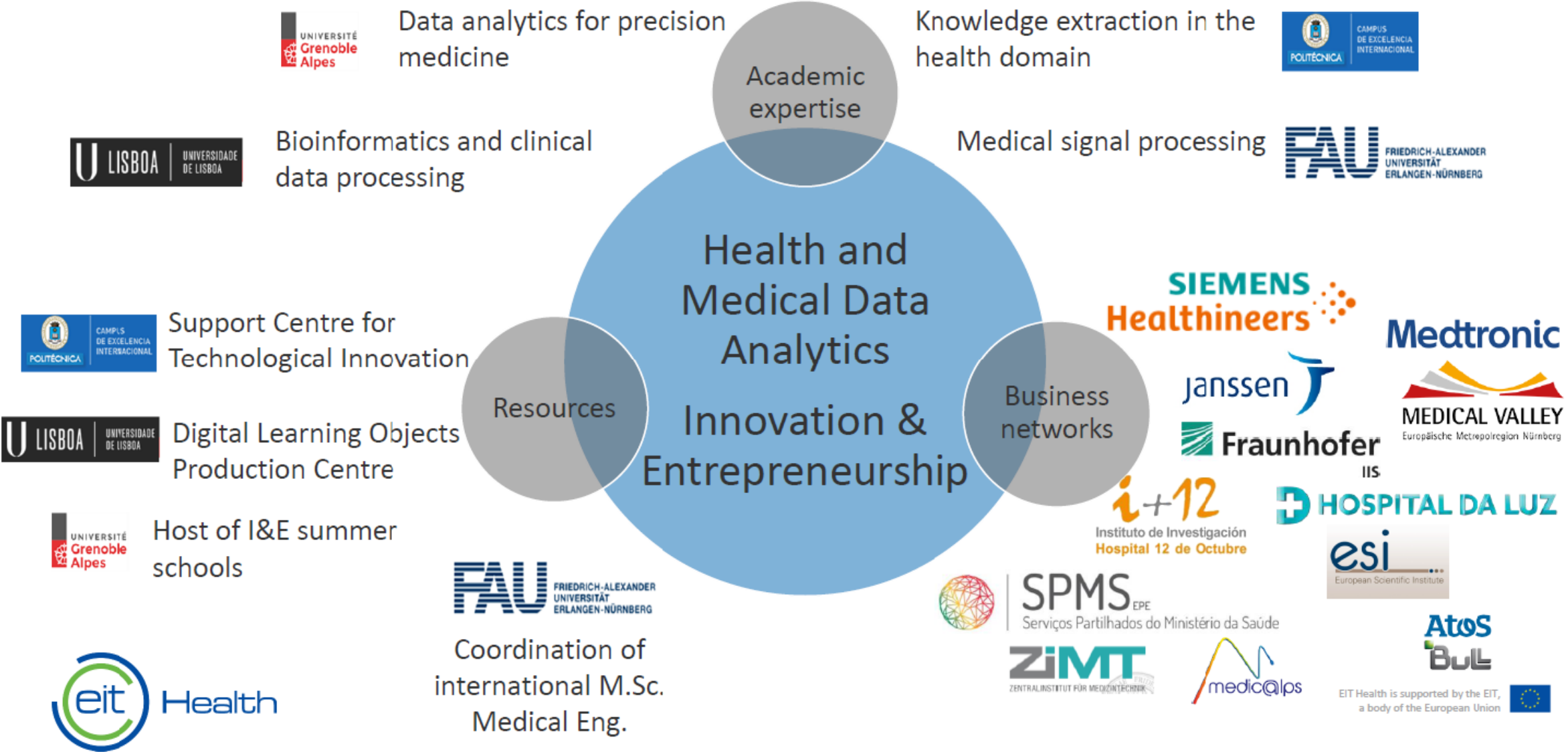




Why HMDA?

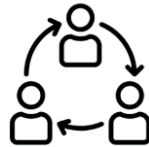


Roles and complementarity of the team

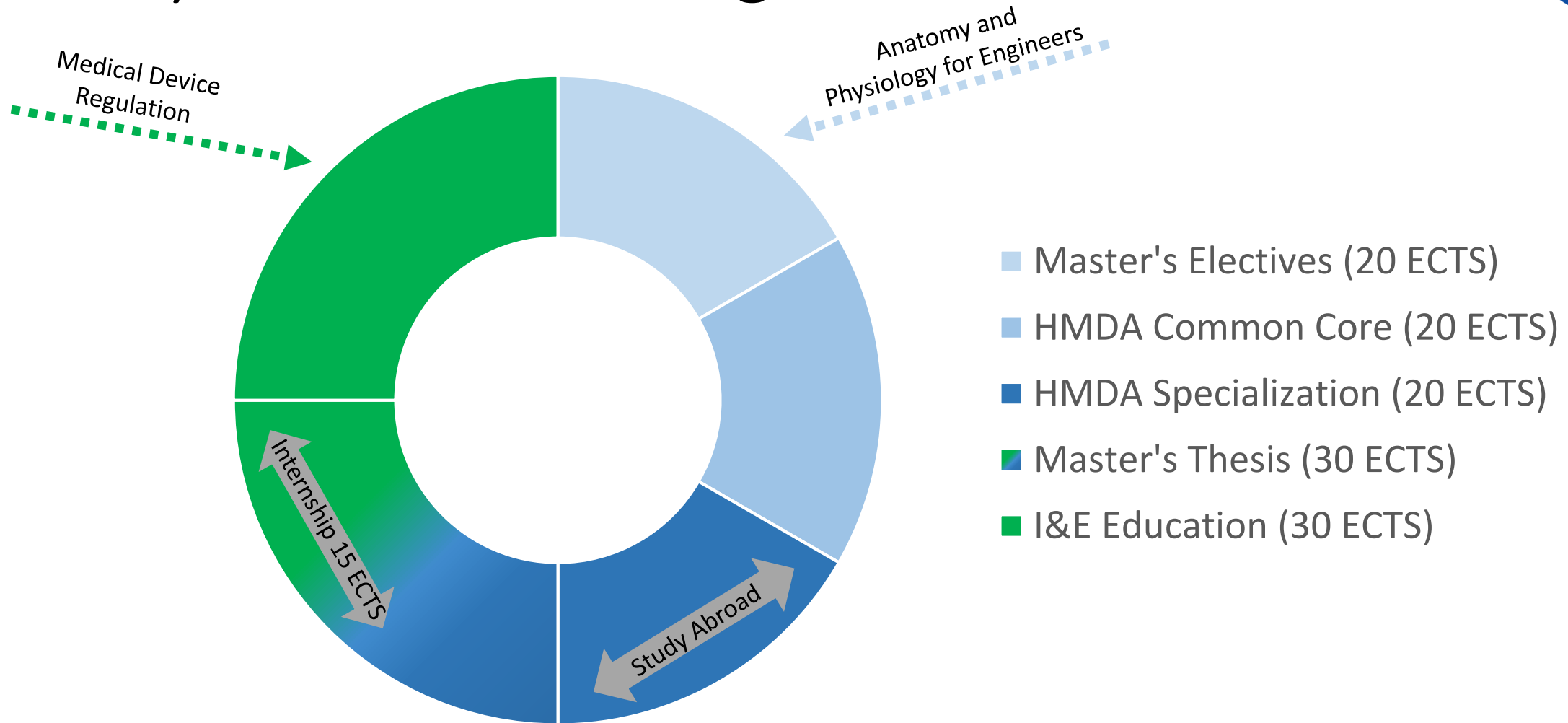


Market Demand

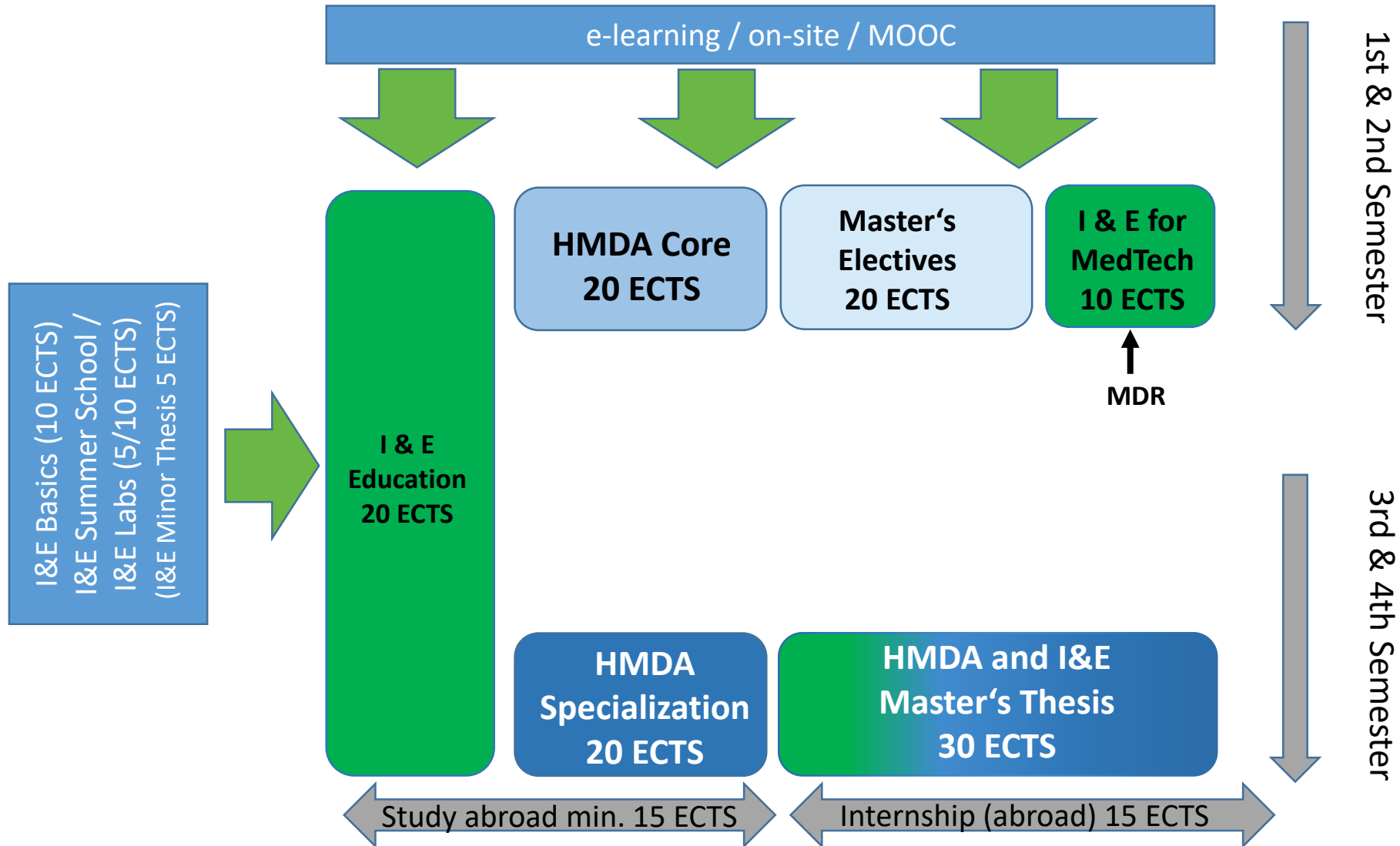
- Top-notch technological knowledge
- Entrepreneurial skills
- Hands-on attitude
- Intercultural competence
- Team-oriented work style



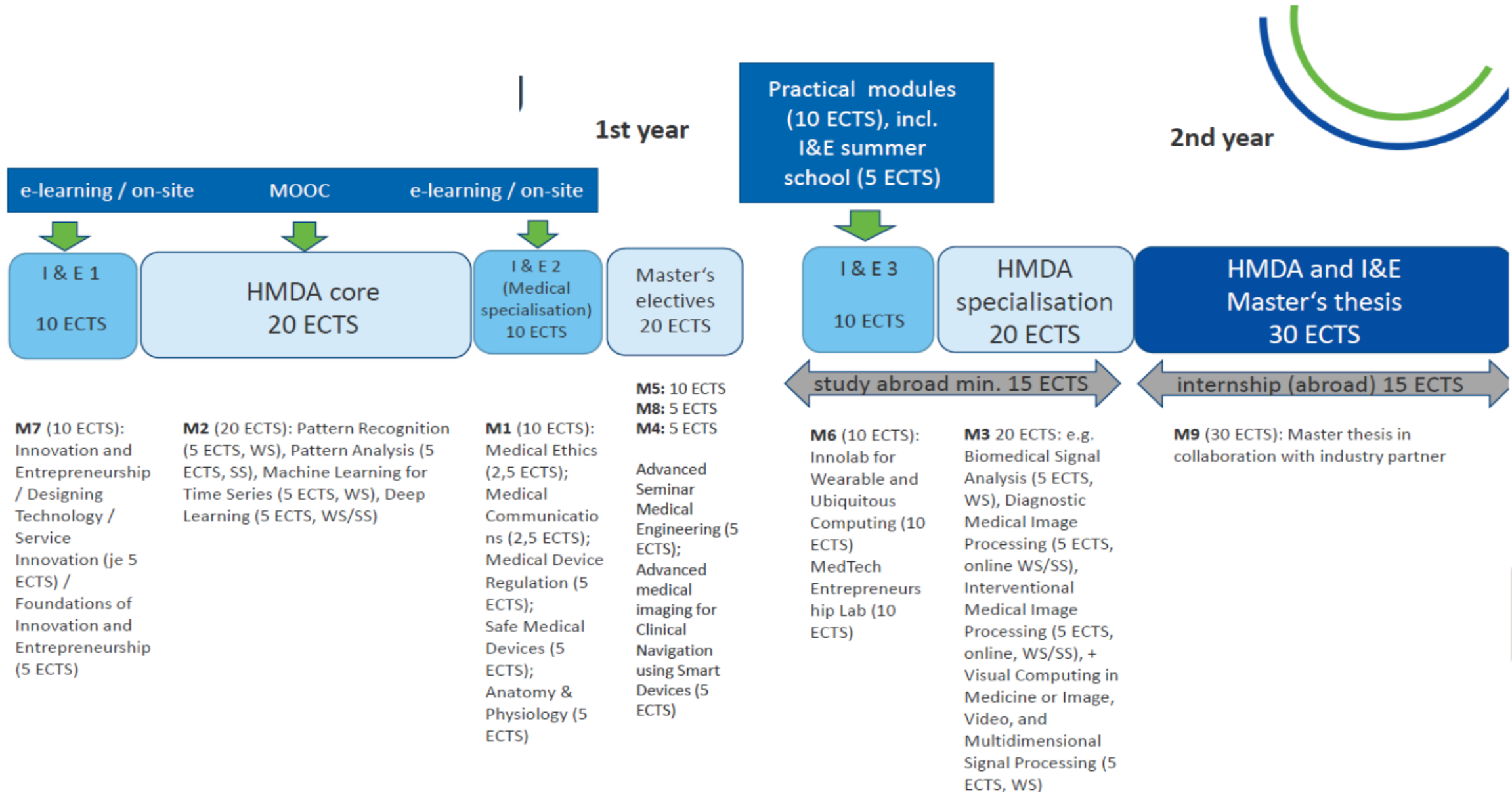
Study Contents & Programme Structure



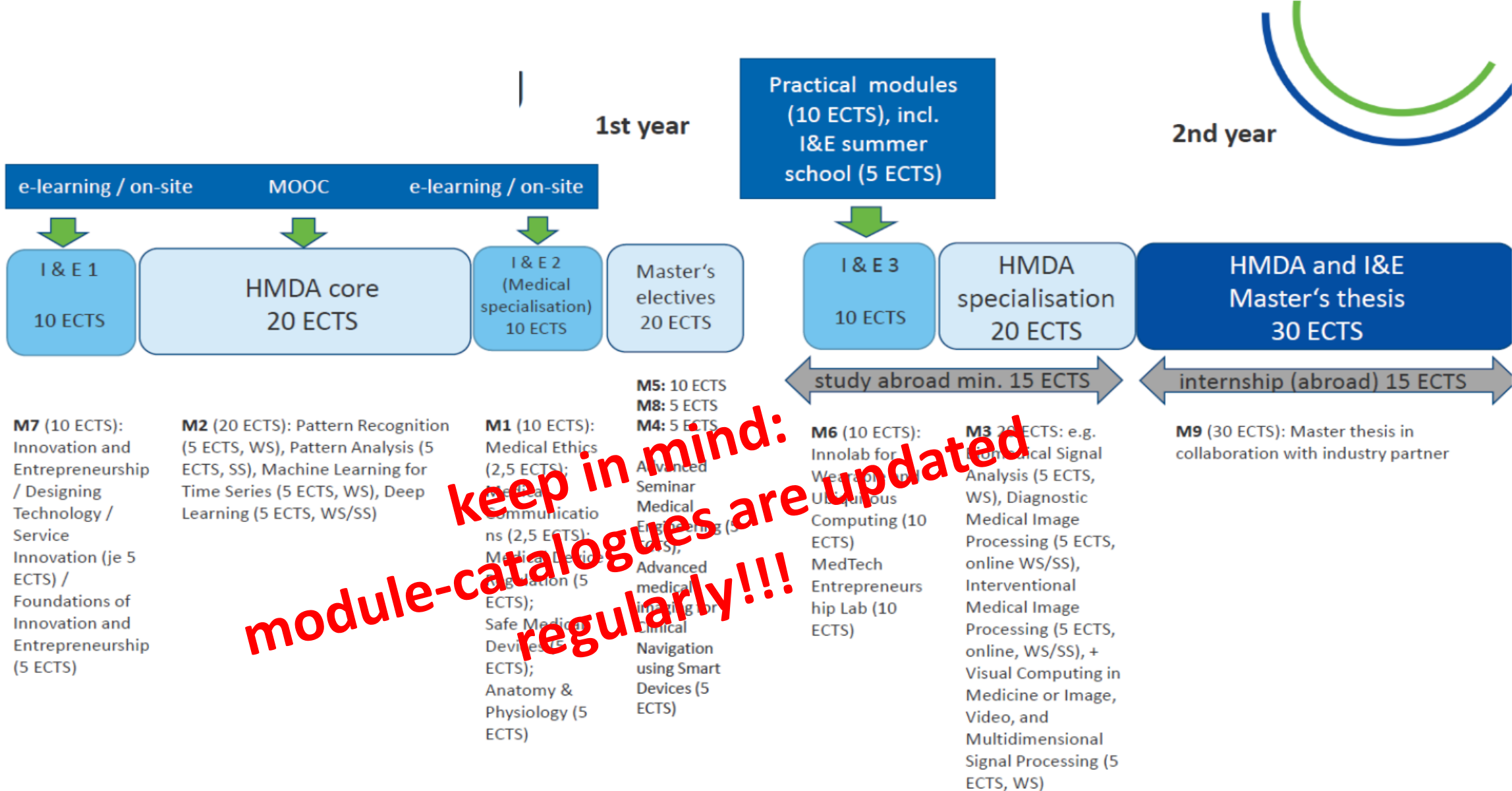
Study Contents & Programme Structure



Friedrich-Alexander-Universität Erlangen-Nürnberg



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Shared Structure – e.g. I&E



UNIVERSIDADE
DE LISBOA

I&E 1 (1st semester)

- Information Systems and Project Management (7,5 ECTS)
- User Centred Design (7,5 ECTS)
- Entrepreneurship, Innovation and Technology Transfer (6 ECTS)
- [...]

I&E 2 (2nd semester)

- Business Project Management (7,5 ECTS)
- Project in Information and Software Engineering (12 ECTS)
- Project in Biomedical Engineering (6 ECTS)
- [...]

Example



I&E 3 (3rd semester)

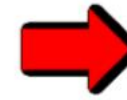
- Entrepreneurship and Innovation (3 ECTS)
- Entrepreneurial Process and Tools (6 ECTS)
- Research and Development Projects (3 ECTS)
- Biomedicines Innovative Project (6 ECTS)
- [...]



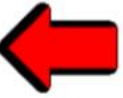
HMDA's Summer School on Learning from Health Data

Master Program Medical Engineering: Structure

- Total of 120 ECTS credits should be evenly spread over four (or five) semesters; no strict rule but highly recommended: \approx 30 ECTS credits per semester
- Few compulsory modules (conditional subjects, some mandatory subjects in the catalogue, see footnotes there!)
- Mostly free choice within the list for each module group
- Not all lectures are offered in winter and summer (see catalogue), time slots may differ from semester to semester; there might be time overlaps
- Recommendation for going abroad: 3rd semester (start planning now)



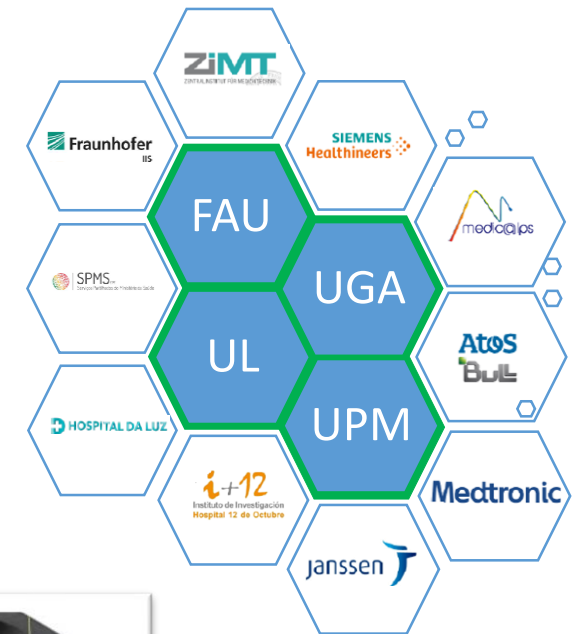
M1	Medizinische Vertiefungsmodule/Medical specialisation modules gemäß § 44a Abs. 1	10
M2	Ingenieurwissenschaftliche Kernmodule/Engineering core modules gemäß § 44a Abs. 2	20
M3	Medizintechnische Kernmodule/Medical Engineering core modules gemäß § 44a Abs. 3	20
M4	Hauptseminar Medizintechnik/Advanced Seminar Medical Engineering gemäß § 44a Abs. 4	5
M5	Medizintechnische Vertiefungsmodule/Medical Engineering specialisation modules gemäß § 44a Abs. 5	10
M6	Medizintechnische Praxismodule/ Medical Engineering practical modules gemäß § 44a Abs. 6	10
M7	Flexibles Budget Technische Fakultät/Flexible budget Faculty of Engineering	10
M8	Freie Wahl Uni/Free choice Uni	5
M9	Masterarbeit/Master's thesis	30
Summe ECTS-Punkte		120



>>management of student's mobility (general)<<

Students apply for one of the partner universities for their **third semester** abroad ...

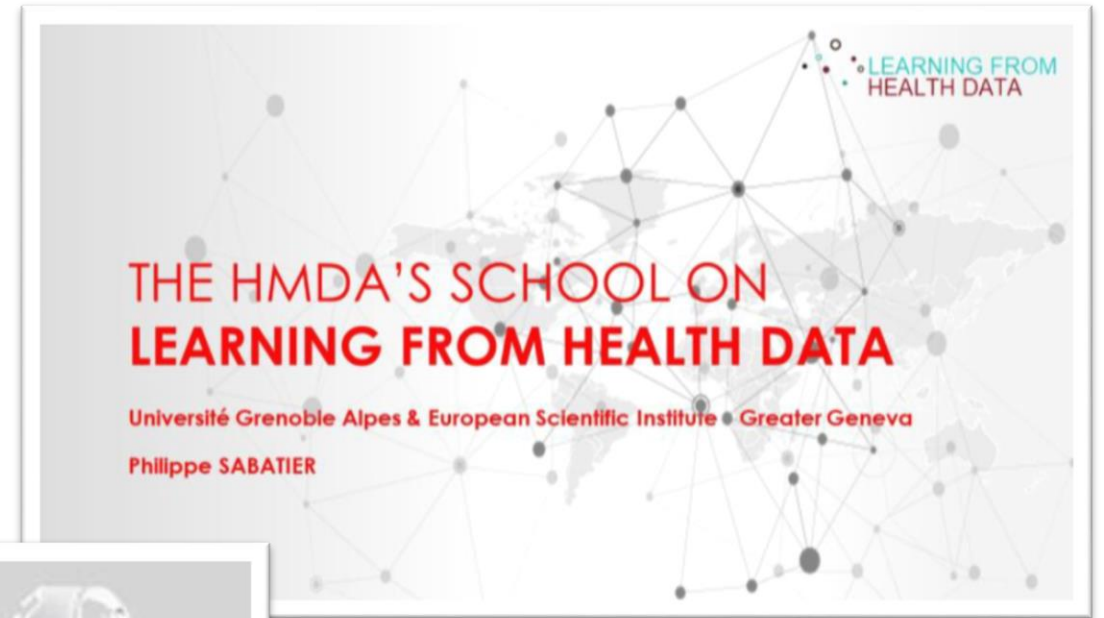
- students benefit from **Erasmus+** structures serving as a framework
 - regular application process
- at least one semester abroad (including a minimum of **15 ECTS**)
 - students could extend their time abroad – **HMDA's mobility structures are flexible**, all tracks are aligned with the general structure
 - **master thesis & internships** can be done abroad (local support offered)
 - **check: www.masterhmda.eu for courses offered at the partner universities.**
 - **Apply for the mobility scholarship before January 31st.**



The HMDA's Summer School (UGA)

- UGA has successfully hosted various EIT Health Summer Schools throughout the last years.
 - Bringing together **students, data-scientists, researchers** and **business partners**.
1. keynotes & round table (speech & discussion)
 2. research & development session
 3. breakout sessions on advanced applications
 4. pitching sessions
 5. tech. transfer and business development sessions

Open for M.Sc. and PhD students!



Study Coordinators:

PD Dr. Tino Haderlein & Dr. Felix Schmutterer

- blue computer science tower (Martensstr. 3), room 02.158 Open consultation (drop-in without appointment): Mon–Thu, 1–4 p.m.
- Appointments: Studienberatung-Medizintechnik@fau.de
- advice for your studies
- accreditation of coursework achievements
- support with formalities
- all kinds of questions regarding your studies

www.masterhmda.eu

