Theoretical core courses 12 ECTS

Optional courses 53 ECTS
- Advanced Composites in Engineering Structures
- Advanced continuum mechanics
- Advanced design of concrete structures
- Advanced methods in computational solid mechanics
- Advanced Steel Design
- Analyse et gestion des risques
- Analyse et management des risques industriels
- Barrages et ouvrages hydrauliques annexes
- Conception des constructions en bois
- Data and artificial intelligence for transportation
- Decision-aid methodologies in transportation
- Développements en économie des transports
- Droit de la construction pour ingénieurs I
- Droit de la construction pour ingénieurs II
- Eco-morphologie fluviale
- Economie des réseaux d'infrastructures
- Economie hydraulique
- Energy Geosciences
- Engineering geology for geo-energy
- Esthétique des ouvrages de génie civil
- Études d'impact
- Exploitation ferroviaire
- Géologie de la construction et de l'environnement
- Geophysics for engineers
- Gestion de la maintenance des infrastructures
- Hydraulique fluviale et aménagement des cours d'eau
- Management de projet et analyse du risque
- Matériaux et structures
- Modélisation des systèmes énergétiques
- Nonlinear analysis of structures
- Ondes de crue et de rupture de barrage
- Planification intégrée des infrastructures d'énergie
- Ponts en béton
- Programming Concept in Scientific Computing
- Reservoir geo-mechanics engineering
- Séismique engineering
- Selected topics in mechanics of solids and structures
- Systèmes de transports
- Thermodynamics of comfort in buildings
- Travaux souterrains
- Urban hydraulic systems
- Villes et transports
- Voies de circulation

Human and social sciences 6 ECTS
- Project in human and social sciences

The program includes an 8-week compulsory internship

Students may choose to pursue a 30 ECTS specialization:
- B Geotechnical Engineering
- C Transportation and Mobility
- D Structural Engineering
- E Hydraulic Engineering and Energy

Or a 30 ECTS Minor:
- Computational Science and Engineering
- Design Intégré, Architecture et Durabilité (IDEAS)
- Energy
- Management, Technology and Entrepreneurship
- Urban Planning and Territorial Development

A specialization or Minor is included in the 120 ECTS credits.

The EPFL civil engineering academic performances are top-rated at the international level. Its master curriculum is widely recognized for the high quality of its training and offers very good perspectives of professional insertion.

The increased demand in Switzerland for highly qualified engineers in the civil engineering sector provides excellent career prospects for our students. Civil engineering consulting firms, state administrations and construction companies all benefit from hiring our graduates. Furthermore, the scientific skills and the versatility of our engineers also allow them to pursue very diverse professional activities. Whatever path you choose, you will collaborate with numerous partners from the domains of architecture, environment, sociology, economy, energy, or politics. The know-how of the Swiss civil engineers is very well respected abroad, which also opens the door to an international career.

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