ABP Master Track Urban Systems & Real Estate (USRE)

Feixiong Liao

The Department of the Built Environment
Content

• USRE areas of expertise
• USRE Courses
• USRE Professors
• Your Mentor
• Your Personal Study Program
• Double degree and Double track programs
• International Experience
Urban Systems and Real Estate

Creating healthy, safe and viable urban environments.
USRE fields of expertise

• REMD - Real Estate Management & Development

• UPT - Urban Planning & Transportation

• ISBE - Information Systems for the Built Environment
## USRE Courses

<table>
<thead>
<tr>
<th>Category</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core courses</td>
<td>25 ec</td>
</tr>
<tr>
<td>Specialization courses</td>
<td>30 ec</td>
</tr>
<tr>
<td>Free electives</td>
<td>20 ec</td>
</tr>
<tr>
<td>Graduation project</td>
<td>45 ec</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120 ec</strong></td>
</tr>
</tbody>
</table>
USRE Core Courses  (select all)

7ZW3M0  Urban Planning II (Q1)
7ZU3M0  Managing Place and Property (Q2)
7ZW7M0  Urban Research Methods (Q3)
7ZW4M0  Built Environment and Smart Mobility (Q4)
7ZM5M0  Process Modeling and Information Management (Q4)

You can find information on courses in Osiris  (https://tue.osiris-student.nl/#/login)
# USRE Specialization Courses (select 30 ec)

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>7ZU4M0</td>
<td><em>Econometric analysis of housing markets: data, tools and strategies</em> (Q1)</td>
</tr>
<tr>
<td>7ZU1M0</td>
<td><em>Housing Portfolio Management</em> (Q1-Q2, project)</td>
</tr>
<tr>
<td>7U772</td>
<td><em>Corporate Real Estate Strategy</em> (Q3)</td>
</tr>
<tr>
<td>7ZU2M0</td>
<td><em>Redevelopment of Problem Areas</em> (Q3-Q4, project)</td>
</tr>
<tr>
<td>7ZW5M0</td>
<td><em>Smart healthy urban environments</em> (Q2)</td>
</tr>
<tr>
<td>7ZW1M0</td>
<td><em>Big Data for Urban &amp; Transportation Analysis</em> (Q3-Q4, project)</td>
</tr>
</tbody>
</table>
USRE Specialization Courses (continued)

7ZM1M0  Research and Development project (Q1-Q2, Q3-Q4)
7M900  Fundamentals of Building Information Modeling (Q2)
7ZM7M0  Parametric Design (Q3)
7ZM8M0  Collaborative Design (Q3)
7ZZ9M0  Design Science Methodology and Systems Engineering (Q1)
USRE Electives (select 20 ec, examples)

7LY8M0    Smart Cities (Q3)
7ZW6M0    History of Housing and Cities (Q3)
7ZAWE0    Internship USRE Academic Work Experience
7ZRWE0    Internship USRE Relevant Work Experience

You may select master courses from BE, other departments, or other universities as well.
USRE Graduation Project 7Z45M0 (45 ec)

• Starts every quarter
• 3 quarters
  o Write graduation plan
  o Execute the plan
• We offer graduation subjects, however ... *(own ideas fit the expertise of the unit)*
• Students may discuss own ideas with potential supervisors
### Schedule:

<table>
<thead>
<tr>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>7Q3M0</td>
<td>Seminar urbanism and architecture (a)</td>
<td>7Q3M0</td>
<td>Seminar urbanism and architecture (a)</td>
</tr>
<tr>
<td>7Q2M0</td>
<td>Research in urbanism and architecture II</td>
<td>7Q3M0</td>
<td>Architectural and urban theory II</td>
</tr>
<tr>
<td>7Q1M0</td>
<td>Masterproject 1: urbanism (10 ECTS)</td>
<td>7Q2M0</td>
<td>Masterproject 2: architecture (10 ECTS)</td>
</tr>
<tr>
<td>7Q1M0</td>
<td>Masterproject 1: urbanism (10 ECTS)</td>
<td>7Q1M0</td>
<td>Masterproject 2: urbanism (10 ECTS)</td>
</tr>
<tr>
<td>7Q1M0</td>
<td>Combined masterstudio Architecture and Urban Design (10 ECTS)</td>
<td>7Q0M0</td>
<td>Combined masterstudio Architecture and Urban Design (10 ECTS)</td>
</tr>
<tr>
<td>7Q1M0</td>
<td>Urban trends and strategies</td>
<td>7Q1M0</td>
<td>Types and methods in architecture</td>
</tr>
<tr>
<td>7Q0M0</td>
<td>Building and environmental engineering</td>
<td>7Q1M0</td>
<td>Urban planet</td>
</tr>
</tbody>
</table>

### Schedule:

- **Urban Systems and Real Estate**
  - [https://educationguide.tue.nl/programs/graduate-school/masters-programs/architecture-building-and-planning/curriculum](https://educationguide.tue.nl/programs/graduate-school/masters-programs/architecture-building-and-planning/curriculum)
Your options in Q1

For the first quartile, choose 15 ec from the following USRE courses:

7ZW3M0 Urban Planning II (core course)

Specialization courses:
7ZU4M0 Econometric analysis of housing markets: data, tools and strategies
7ZU1M0 Housing Portfolio Management (to be continued in Q2)
7ZZ9M0 Design Science Methodology & Systems Engineering
7ZM1M0 Research & Development project (to be continued in Q2)
USRE professors

• 3 full professors
• 5 associate professors
• 10+ assistant professors
Your mentor

I will assign a mentor upon your request. I need to know your preferred specialization within USRE, if any:

• Real Estate Management & Development
• Urban Planning & Transportation
• Information Systems for the Built Environment

Please send me an email: f.liao@tue.nl
Your Personal Study Program (PSP)

- You have to compose your own study program
- Discuss it with your mentor
- If your mentor approves $\rightarrow$ (students) send it to the examination committee
- We expect you to finish this in Q1
- You can decide yourself regarding courses/projects in Q1
- No approved PSP $\rightarrow$ No graduation project!

- PSP can be adapted
Double degree programs (2 diplomas: 120 + 45 ec)

- **USRE and CME**: Construction Management and Engineering
- **USRE and IE&IS**: Innovation sciences

Meet requirements of both programs; one common graduation project (60 ec)
Double track program *(1 diploma: 120 + 30 ec)*:

**ABP-USRE** and **ABP-AUDE** (Architecture); 3 packages:

- USRE-REMD and AUDE
- USRE-UPT and AUDE
- USRE-ISBE and AUDE

Meet (most) requirements of both programs; one common graduation project of 60 ec.

Both tracks will be stated on the diploma.

For excellent students only.
Internationalization *(usually 1 semester)*

- Core/Specialization courses; Electives
- Research Internship
- Part of graduation project
New tracks – more info: Soora Rasouli s.rasouli@tue.nl

- Sustainable Urban Mobility Transitions
- Smart Mobility Data Science and Analytics
- Part of EIT Urban Mobility Master School

- two-year Master's Program at two different universities, in two different countries
- Two Master degrees
Questions?

Email: f.liao@tue.nl

Thank you