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Tempus

# Academic Surveying Education in Austria



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# Skills in Fields of Sciences Needed for Specific Branches in Surveying



	TU WIEN		← Measuring Sciences				Land Management →		BOKU
	Geodesy	Engineering Surveying	Facility Management	GIS-Technology & Mapping	Land & Cadastral Surveying	Spatial Planning	Environmental Resource Management		
<p><i>much</i> → <i>little</i></p>									
<b>Natural Sciences</b> (mathematics, informatics, physics, astronomy, hydrology, biology, geography, etc.)	●								
<b>Technical Sciences</b> (geodesy, surveying, civil engineering, mechanics, architectur, electronics, etc.)	●								
<b>Agricultural Sciences</b> (agriculture, plant breeding, horticulture, forestry, etc.)									
<b>Social Sciences</b> (politics, legal sciences, economy, sociology, spatial planning, statistics, etc.)	●								
<b>Human Sciences</b> (philosophy, theology, history, cultural sciences, etc.)									

# Present Status - Surveying Study Courses

## University of Technology (Vienna and Graz)



### VIENNA:

1 Master Program

- [Surveying and Geoinformation](#)

1 Bachelor Program

- [Surveying and Geoinformation](#)

### GRAZ:

1 Master Program

- [Geomatics Sciences](#)

1 Bachelor Program

- [Geomatics Engineering](#)

### AUSTRIAN:

- Area: 83.000 km<sup>2</sup>
- Inhabitants: 8 millions

# Present Status

## Surveying Lectures



BOKU-University of Natural Resources and Life Sciences Vienna

- Lectures in 6 Bachelor and 10 Master Programs



# Present Status

## Lectures in Geoinformation / Cartography / Remote Sensing

University of Innsbruck

Carinthia University of Applied Sciences

- Bachelor "Geoinformation"

University of Applied Sciences Wiener Neustadt

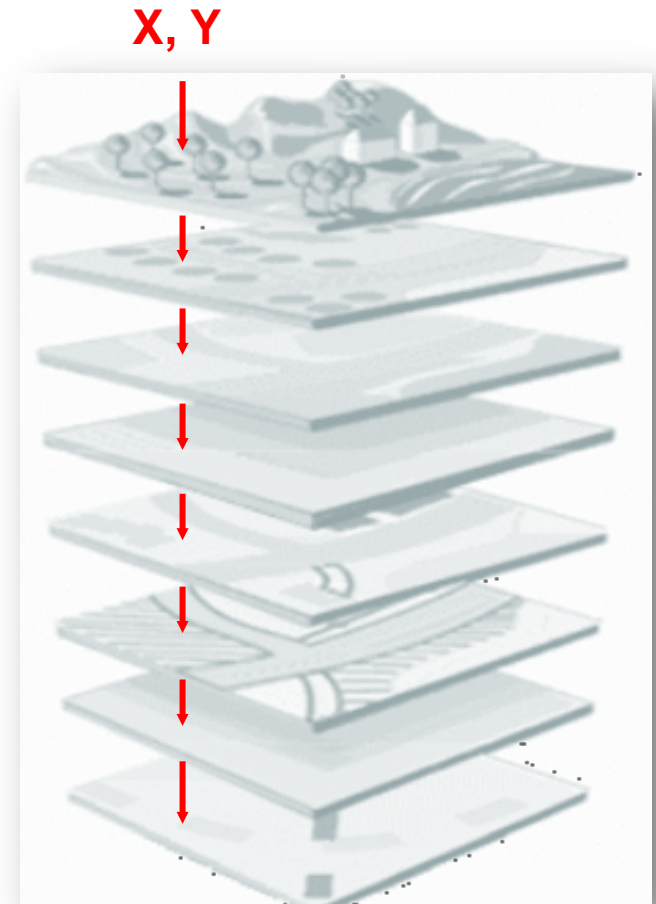
- Bachelor & Master "Geoinformation"

University of Vienna

University of Salzburg

University Graz

University Klagenfurt



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# Detailed Information for Degree Programs at BOKU



University of Natural Resources and Life Sciences, Vienna

Programmes selected 2012/13

Degree/ID	Academic year				
	2009/10	2010/11	2011/12	2012/13	
Bachelor programme	Language	German	English		
	Grouping	Degree type	Field of studies	Status type	
Agricultural Sciences (UG2002/12U)	255	180	6	BSc	
Environment and Bio-Resources Management (UG2002/11U)	227	180	6	BSc	
Environmental Engineering (UG2002/12U)	231	180	6	BSc	
Equine Sciences (UG2002/11U)	602	180	6	BSc	
Food Science and Biotechnology (UG2002/12U)	217	180	6	BSc	
Forestry (UG2002/12U)	225	180	6	BSc	
Landscape Architecture and Landscape Planning (UG2002/12U)	219	180	6	BSc	
Viticulture, Ecology and Wine Economics (UG2002/11U)	296	180	6	BSc	
Wood and Forest Technology (UG2002/11U)	226	180	6	BSc	
Master programme	Agricultural and Food Economy (UG2002/10U)	457	120	4	Dipl.-Ing
	Agricultural Biology (UG2002/10U)	459	120	4	Dipl.-Ing
	Alpine Natural Dangers / Watershed Regulation (UG2002/12U)	477	120	4	Dipl.-Ing
	Applied Limnology and International Joint Master Programme: Limnology & Wetland Management (UG2002/12U)	448	120	4	MSc
	Applied Plant Sciences (UG2002/12U)	455	120	4	Dipl.-Ing
	Biotechnology (UG2002/12U)	416	120	4	Dipl.-Ing
	DDP EM in Animal Breeding and Genetics (UG2002/12U)	450	120	4	MSc
	Double degree programme: Environmental Sciences - Soil, Water, Biodiversity (ENV/LEUBO) (UG2002/12U)	449	120	4	MSc
	Double degree programme: Technical and Economic Exploitation of Renewable Resources (UG2002/12U)	471	120	4	Dipl.-Ing

semester plan - BOKUonline - Universität für Bodenkultur Wien - Google Chrome

[https://online.boku.ac.at/BOKUonline/semesterplaene.semesterplan?csr\\_nr=162&csj\\_nr=1705&csum\\_flag=J&cbckto=T&corg=1&csprache\\_nr=2&csprache=de](https://online.boku.ac.at/BOKUonline/semesterplaene.semesterplan?csr_nr=162&csj_nr=1705&csum_flag=J&cbckto=T&corg=1&csprache_nr=2&csprache=de)

Diese Seite ist auf **Englisch** Soll sie übersetzt... **Übersetzen** **Nein** **Englisch nie übersetzen** **Optionen**

231 Environmental Engineering (UG2002/12U, Bachelor programme, current) BOKU online

**Semester plan**  
2012/13

Course no.	Title	Person	Duration (SH)	Type	off. in sem.	Rec. sem.	Exam. type	ECTS credits
<b>1st semester</b>								
850110	<a href="#">Selected topics in Environmental Engineering [STEOP course]</a>	Berger W ( Stierschneider E ), Brückl J, Cepuder P, Franke A, Fuchs H, Fürst J, Haberl R, Haider K, Holzmann H, Huber-Humer M, Laaha G, Pelikan B, Rampazzo N, Seher W	2	L	W / S	1	---	2
875110	<a href="#">Material science [STEOP course]</a>	Krawtschuk A ( Kamper S ), Strauss A, Zimmermann T, Smutny R, Neururer C, Voit K, Franke A, Grossberger H, Haider K	2	L	W / S	1	---	2
835106	<a href="#">Mathematics I</a>	Nowak W ( Fesselhofer R, Führer H, Huber S )	2	L	W	1	---	2
770150	<a href="#">General Chemistry</a>	Hinterstoisser B, Smidt E	3	L	W	1	---	3
892100	<a href="#">Physics (KTWW)</a>	Mayer H ( Kainz M )	3	L	W	1	---	3
872100	<a href="#">Geology</a>	Schwingenschlögl R	3	L	W	1	---	3
872138	<a href="#">Geology exercises</a>	Ottner F ( Mitterlehner C ), Lühgens C ( Rabl-Hofbauer E ), Mergili M, Bickel L, Bonatzky T	1	P	W	1	---	1
831135	<a href="#">General Botany</a>	Hietz P	3	L	W	1	---	3
814102	<a href="#">Meteorology</a>	Kromp-Kolb H ( Baumgartl S, Rauter D )	2	L	W	1	---	2
814104	<a href="#">meteorology</a>	Kromp-Kolb H ( Rauter D ), Eitzinger J, Formayer H	2	L	S	1	---	2
875101	<a href="#">Mechanics</a>	Zimmermann T ( Prammer R ), Haider K ( Strieder E )	3	L	W	1	---	4
736105	<a href="#">Basics of Law and Legislation</a>	Krepp F	3	L	W	1	---	3
731104	<a href="#">Fundamentals</a>							

<https://online.boku.ac.at>

## New Challenges: Bologna Process

- Easy readable and comparable degrees
- A system based on two main cycles (undergraduate and graduate)
- A system of credits promoting student's mobility (ECTS-points)
- Mobility for students, teachers, researchers and administrative staff
- Co-operation in quality assurance
- Lifelong learning as an essential element
- Promotion of the attractiveness of the European Higher Education Area





## New Challenges – Recruitment of Students

- How to attract surveying courses for young people and how to improve the role of surveyors in society?
- Who are the potential players to promote our profession and the appropriate education?
- Should promotion of profession be done on a local, national or global level?
- Which measures have to be done or have to be enhanced to bring students to the lecture halls of surveying institutes?





University of Natural Resources and Life Sciences (BOKU Vienna)

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<http://www.rali.boku.ac.at/ivfl.html>