

## UFV ONLINE COURSES IN FOREIGN LANGUAGES

### TERM: 2026-1

Since 2020, UFV has offered **free** online courses taught in foreign languages for students enrolled at other educational institutions and for degree holders. In the first semester of 2026, UFV will offer a total of 18 courses in various fields. This call outlines the requirements and procedures necessary for course enrollment.

### 1. Eligibility

To apply, you must fall into one of the following two categories:

- **Academic Mobility** - Candidates who are currently enrolled as students at other higher education institutions.
- **Degree Holder** - Candidates who already hold an undergraduate or bachelor's degree.

### 2. Application process

- Applications will be accepted **exclusively via an online form**, available at the following link: <https://forms.gle/U5rbuXEj5VzyGiJY9>.
- The application **deadline is on January 27th at 8 a.m. (BRT)**.
- Applications will be evaluated by the course coordinators, considering the curriculum vitae and academic transcript.
- Approved students will receive access information to UFV systems via email by March 6th.
- **Classes will take place between March 09th and July 10th, 2026.**

### 3. Required documents

To proceed with the application, the candidate must have all the documents listed below.

- Copy of National Identity Card (**passport** preferred for foreign applicants);
- Copy of **birth or marriage certificate with parent names** (if you do not have a document containing this information, **fill the [Declaration of Personal Information](#) document and stamp it at the Notary Office**);

- **Nomination letter** - **only** for Academic Mobility candidates - **“Self-nominated” candidates are not accepted for academic mobility**;
- Proof of current enrollment - **only** for Academic Mobility candidates - **The document must have been issued within the last 60 days.**
- Copy of the **Undergraduate/Bachelor Diploma** (if you have it);
- Copy of the Undergraduate/Bachelor **Academic Transcript** (if you have it);
- Copy of the **Master's Diploma** (if you have a Master's degree);
- Copy of the Master's **Academic Transcript** (if you have a Master's degree);
- Copy of the **Doctoral Diploma** (if you have a Doctoral degree);
- Copy of the Doctoral **Academic Transcript** (if you have a Doctoral degree);
- Copy of **CPF** (**mandatory** for Brazilian citizens; optional for other nationalities);
- Copy of **Voter Registration Card** (for Brazilians **only**);
- Copy of **Military Document** (for Brazilian men **only**);
- Face photo - recent photo, 3x4 format, with light background.

**Only documents in English or Spanish will be accepted without translation. For other languages, translation is required.**

#### 4. Other important information

**The program does not confer a degree.** Students who complete courses will receive an official transcript of records. An official transcript for completed courses may allow the credits to be reused later in Master's or PhD programs at UFV.

**The selected courses must be related to your area of expertise.**

#### 5. Available online courses

Code	Course name	Lectures	E-mail
ARQ 627	Energy Efficiency in the Built Environment	Joyce Correna Carlo	<a href="mailto:joycecarlo@ufv.br">joycecarlo@ufv.br</a>
BAN 793	Use Of Statistical Software In Zoological Data Analysis	Luis Viteri Jumbo	<a href="mailto:luis.o.viteri@unl.edu.ec">luis.o.viteri@unl.edu.ec</a>

Code	Course name	Lectures	E-mail
BQI 762	Structural bioinformatics	Célio Cabral Oliveira	<a href="mailto:celio.oliveira@lnbr.cnpem.br">celio.oliveira@lnbr.cnpem.br</a>
CBF 770	Plant Stress Physiology	Eduardo Gusmão Pereira	<a href="mailto:egpereira@ufv.br">egpereira@ufv.br</a>
CIV 660	Science and Technology of Building Materials	José Maria Franco De Carvalho	<a href="mailto:josemaria.carvalho@ufv.br">josemaria.carvalho@ufv.br</a>
CIV 642	Biological wastewater treatment processes	Ann Munteer	<a href="mailto:ann@ufv.br">ann@ufv.br</a>
CIV 670	Introduction to Innovation and Technological Entrepreneurship in Engineering	José Maria Franco de Carvalho	<a href="mailto:josemaria.carvalho@ufv.br">josemaria.carvalho@ufv.br</a>
DIR 612	Education, Democracy and Justice	Evanilda Nascimento de Godoi Bustamante	<a href="mailto:evanildagodoi@ufv.br">evanildagodoi@ufv.br</a>
ELT 651	Image Processing and Applications	Alexandre Santos Brandão	<a href="mailto:alexandre.brandao@ufv.br">alexandre.brandao@ufv.br</a>
ENG 688	Anaerobic Digestion of Wastes	André Pereira Rosa	<a href="mailto:andrerosa@ufv.br">andrerosa@ufv.br</a>
FIT 610	Post-harvest physiology of horticultural products	Lucilene Silva de Oliveira	<a href="mailto:lucilene.oliveira@ufv.br">lucilene.oliveira@ufv.br</a>
FIT 632	Plant Cell, Tissue and Organ Culture	Sérgio Yoshimitsu Motoike and Edgard Picoli	<a href="mailto:motoike@ufv.br">motoike@ufv.br</a> ; <a href="mailto:epicoli@ufv.br">epicoli@ufv.br</a>
FIT 678	Genetic Data Analysis For Plant Breeding	Guilherme da Silva Pereira	<a href="mailto:g.pereira@ufv.br">g.pereira@ufv.br</a>
LET 604	Portuguese for Foreigners	Idalena Chaves	<a href="mailto:idalena@ufv.br">idalena@ufv.br</a>
QUI 720	Advanced Inorganic I	Márcio José da Silva	<a href="mailto:silvamj2003@ufv.br">silvamj2003@ufv.br</a>
QUI 722	Synthetic Methodologies in Inorganic Chemistry and Descriptive Chemistry of Representative Groups	Garbas Anacleto dos Santos Junior	<a href="mailto:garbas.junior@ufv.br">garbas.junior@ufv.br</a>
SOL 649	Soil Management in the Tropics	Teogenes Senna de Oliveira, Igor Rodrigues de Assis, Raphael Bragança Fernandes and Richard Bell	<a href="mailto:teo@ufv.br">teo@ufv.br</a> ; <a href="mailto:igor.assis@ufv.br">igor.assis@ufv.br</a> ; <a href="mailto:raphael@ufv.br">raphael@ufv.br</a> ; <a href="mailto:R.Bell@murdoch.edu.au">R.Bell@murdoch.edu.au</a>
VET 638	Stem Cells in Tissue Regeneration	Emily Correna Carlo Reis	<a href="mailto:emily.carlo@ufv.br">emily.carlo@ufv.br</a>

## 6. Course timetable (BRT)

REMOTE COURSES 2026-1 (GMT-3)					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00h	FIT 632	BQI 762	CIV 660	CIV 670	SOL 649
	SOL 649	DIR 612	CIV 642		
9:00h	ELT 651	BQI 762	CIV 660	CIV 670	
	FIT 632	DIR 612	CIV 642		
	SOL 649	VET 638			
10:00h	ELT 651	BQI 762	CIV 660	QUI 722	CBF 770
		DIR 612	CIV 642		ENG 688
	LET 604	FIT 678	FIT 678		SOL 649
		QUI 722	LET 604		
		VET 638			
11:00h	ELT 651	BQI 762	FIT 678	QUI 722	CBF 770
		DIR 612			
	LET 604	FIT 678	LET 604		ENG 688
		QUI 722			
		VET 638			
12:00h					CBF 770
					ENG 688
13:00h					
14:00h	FIT 610		ARQ 627		
	FIT 632		QUI 720		
	QUI 720				
15:00h	FIT 610		ARQ 627		
	FIT 632		QUI 720		
	QUI 720				
16:00h	FIT 610		ARQ 627		
17:00h			ARQ 627		
18:00h	BAN 793	BAN 793		BAN 793	
19:00h	BAN 793	BAN 793		BAN 793	

## 7. Course Content

Code / Course Name	Content
<b>ARQ 627</b> Energy Efficiency in the Built Environment	<ol style="list-style-type: none"> <li>1. Introduction.</li> <li>2. State of the art in energy efficiency.</li> <li>3. National and international regulations and standards.</li> <li>4. Energy efficiency variables and external factors.</li> <li>5. Energy audits and commissioning.</li> <li>6. Energy efficiency assessment methods.</li> <li>7. Energy efficiency in the design process.</li> </ol>
<b>BAN 793</b> Use Of Statistical Software In Zoological Data Analysis	<ol style="list-style-type: none"> <li>1. Use of statistical software in zoological data analysis.</li> </ol>
<b>BQI 762</b> Structural bioinformatics	<ol style="list-style-type: none"> <li>1. Structure of biomolecules</li> <li>2. Structural databases</li> <li>3. Visualization of biomolecular structures</li> <li>4. Molecular modeling</li> <li>5. Protein-ligand docking</li> <li>6. Molecular dynamics simulations</li> <li>7. Three-dimensional evolution</li> <li>8. Structural bioinformatics in biotechnology</li> </ol>
<b>CBF 770</b> Plant Stress Physiology	<ol style="list-style-type: none"> <li>1. Plant stress responses.</li> <li>2. Metabolic adjustments and antioxidant metabolism.</li> <li>3. Light stress and thermal stress.</li> <li>4. Water stress and salinity.</li> <li>5. Nutritional stress and resistance to trace metals.</li> <li>6. Environmental pollution stress.</li> </ol>
<b>CIV 660</b> Science And Technology Of Building Materials	<ol style="list-style-type: none"> <li>1. Introduction to Science and Technology of Building Materials;</li> <li>2. Bonding.</li> <li>3. The Architecture of Solids.</li> <li>4. Development of Microstructure.</li> <li>5. Surface Properties.</li> <li>6. Response of Materials to Stress.</li> <li>7. Failure and Fracture.</li> <li>8. Rheology of Fluids and Solids.</li> <li>9. Particulate Composites.</li> <li>10. Aggregates.</li> <li>11. Portland Cement-based Composites.</li> <li>12. Organic Binders-Based Composites.</li> <li>13. Advanced Characterization Techniques.</li> </ol>
<b>CIV 642</b> Biological wastewater treatment processes	<ol style="list-style-type: none"> <li>1. Wastewater characterization and applicability of biological processes.</li> <li>2. Classification of biochemical operations, microorganisms and biological reactors.</li> <li>3. Microbial ecology and bioenergetics of biological treatment processes.</li> <li>4. Biological treatment modeling: process kinetics and reactor hydraulics.</li> <li>5. Treatability studies.</li> <li>6. Conventional treatment processes: anaerobic reactors, stabilization ponds, activated sludge and variants, biological filters.</li> <li>7. Physical, chemical and microbiological monitoring of biological treatment.</li> </ol>

Code / Course Name	Content
<b>CIV 670</b> Introduction to Innovation and Technological Entrepreneurship in Engineering	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Technology Entrepreneurship in Engineering</li> <li>3. Considerations on Viability</li> <li>4. Design and Testing of Sustainable Materials and Products</li> <li>5. Start-up Exploration and Incubation</li> </ol>
<b>DIR 612</b> Education, Democracy and Justice	<ol style="list-style-type: none"> <li>1. Education as a necessity of social life;</li> <li>2. Democracy and education;</li> <li>3. Education and justice;</li> <li>4. Educational Public Policies.</li> </ol>
<b>ELT 651</b> Image Processing and Applications	<ol style="list-style-type: none"> <li>1. Introduction and Fundamentals of Digital Images.</li> <li>2. Image Enhancement Techniques.</li> <li>3. Image segmentation.</li> <li>4. Color Image Processing.</li> <li>5. Morphological Processing.</li> <li>6. Applications.</li> </ol>
<b>ENG 688</b> Anaerobic Digestion of Wastes	<ol style="list-style-type: none"> <li>1. Fundamentals of anaerobic digestion;</li> <li>2. Biomass in anaerobic systems;</li> <li>3. Anaerobic technologies for liquid effluents and solid waste treatment;</li> <li>4. Byproducts of anaerobic digestion and resource utilization.</li> </ol>
<b>FIT 610</b> Post-harvest physiology of horticultural products	<ol style="list-style-type: none"> <li>1. Physiology of pre-harvest and post-harvest development;</li> <li>2. Maturation index;</li> <li>3. Molecular biology and its application in the conservation and quality;</li> <li>4. Fundamentals of post-harvest conservation;</li> <li>5. Postharvest technologies.</li> </ol>
<b>FIT 632</b> Plant Cell, Tissue and Organ Culture	<ol style="list-style-type: none"> <li>1. Plant, cell, tissue and organ cultures: definition, history and applications</li> <li>2. Organization of a plant tissue culture laboratory</li> <li>3. Plant tissue culture media – inorganic components</li> <li>4. Plant tissue culture media – organic components</li> <li>5. Morphogenesis in plant tissue culture</li> <li>6. Applications of plant tissue culture techniques – micropropagation</li> <li>7. Clonal variations in plant tissue culture</li> <li>8. Applications of plant tissue culture techniques – clonal cleanse and rejuvenation</li> <li>9. Applications of plant tissue culture techniques – embryo rescue and synthetic seeds</li> <li>10. Applications of plant tissue culture techniques – conservation of crop genetic resources</li> <li>11. Applications of plant tissue culture techniques – plant genetic transformation</li> <li>12. Applications of plant tissue culture techniques – double haploid technology</li> </ol>
<b>FIT 678</b> Genetic Data Analysis For Plant Breeding	<ol style="list-style-type: none"> <li>1. Introduction to genetic data analysis</li> <li>2. Molecular markers</li> <li>3. Mapping populations</li> <li>4. Linkage map</li> <li>5. QTL mapping</li> <li>6. Genetic data analysis of outcrossing species</li> <li>7. Genome-wide association studies</li> <li>8. Genomic selection</li> <li>9. Genetic data analysis of autopolyploid species</li> </ol>

Code / Course Name	Content
<b>LET 604 (B1 level)</b> Portuguese for Foreigners	<ol style="list-style-type: none"> <li>1. Listening comprehension and analysis of oral texts, in Portuguese.</li> <li>2. Production of oral texts.</li> <li>3. Analysis of academic written texts.</li> <li>4. Reading and interpretation of written texts.</li> <li>5. Writing texts related to several academic genres (abstracts, conference presentations, bibliographical essays, journal articles, conference proceedings, etc).</li> <li>6. Vocabulary and grammar.</li> <li>7. Preparation for the Portuguese language proficiency exam for foreigners (Celpe-bras).</li> </ol>
<b>QUI 720</b> Advanced Inorganic I	<ol style="list-style-type: none"> <li>1. Bonding theories of coordination compounds (TLV, TCC, TOM)</li> <li>2. Group Theory: An introduction to symmetry</li> <li>3. Relevant aspects of the Chemistry of Coordination Compounds; reactivity, characterization</li> <li>4. Isomerism in coordination compounds</li> <li>5. Main Reactions of Coordination Compounds</li> <li>6. Hard and soft acids and bases</li> </ol>
<b>QUI 722</b> Synthetic Methodologies in Inorganic Chemistry and Descriptive Chemistry of Representative Groups	<ol style="list-style-type: none"> <li>1. Hydrogen – Group 1 Group 2 Group 3 Group 14 Group 15 Group 16.</li> <li>2. Acids, bases and ions in aqueous solution.</li> <li>3. Reduction and oxidation.</li> <li>4. Inorganic chemistry in non-aqueous media.</li> <li>5. Synthetic methodologies in inorganic chemistry – Group 17 Group 18.</li> </ol>
<b>SOL 649</b> Soil Management in the Tropics	<ol style="list-style-type: none"> <li>1. The natural environment of the Tropics</li> <li>2. Tropical soil mineralogy</li> <li>3. Tropical soil physics</li> <li>4. Soil acidity</li> <li>5. Soil organic carbon in the Tropics</li> <li>6. Tropical soil fertility</li> <li>7. Soils and Slash-and-Burn Agriculture</li> <li>8. Soil-surface and subsoil constraints in crop lands</li> <li>9. Soil management in rice cultivation</li> <li>10. Soil management in perennials and annuals crops</li> <li>11. Soils and livestock-based tropical systems</li> <li>12. Course introduction</li> <li>13. Soils and Tropical Tree-Based Systems</li> <li>14. Natural reversion or not- reversion of the degradation</li> <li>15. Restoration of drastically altered soils – desertification, salinization, and natural and anthropogenic disasters</li> </ol>
<b>VET 638</b> Stem Cells in Tissue Regeneration	<ol style="list-style-type: none"> <li>1. Basic concepts.</li> <li>2. Postharvest physiology.</li> <li>3. Control of ripening and senescence.</li> <li>4. Treatment and materials before transport and storage.</li> <li>5. Storage systems.</li> <li>6. Physiological disorders and diseases.</li> <li>7. Distribution and use of products.</li> </ol>