

## Semester 1

Subjects of Core Units	Class Hours (VHG)	Weekly Lecture Hours	Weekly Tutorial Hours	Weekly Practical Hours	Personal Work Hours	Coefficient	Credits
Physiology of Lactation in Domestic Ruminants	45	1.5	-	1.5	55	2.0	4
Rationing and Dairy Production	67.5	3	1.5	-	82.5	3.0	6
Biochemistry, Microorganisms and Ecosystems of the Dairy Matrix (1)	45	3	-	-	55	2.0	4
Biochemistry, Microorganisms and Ecosystems of the Dairy Matrix (2)	67.5	3	1.5	-	82.5	3.0	6
<b>Core Units Totals</b>	<b>225</b>	<b>10.5</b>	<b>3</b>	<b>1.5</b>	<b>275</b>	<b>10.0</b>	<b>20</b>
<b>Physicochemical and Microbiological Analysis Methods of Milk and Derivatives</b>							
(Part 1)	22.5	1.5	-	-	27.5	1.0	2
(Part 2)	45	1.5	-	1.5	55	2.0	4
<b>Methodology Units Totals</b>	<b>67.5</b>	<b>3</b>	<b>0</b>	<b>1.5</b>	<b>82.5</b>	<b>3.0</b>	<b>6</b>
<b>Subjects of Discovery Units</b>							
Dairy Sector and Food Safety	22.5	1.5	-	-	2.5	1.0	1.0
<b>Discovery Units Totals</b>	<b>22.5</b>	<b>1.5</b>	<b>0</b>	<b>0</b>	<b>2.5</b>	<b>1.0</b>	<b>1.0</b>
<b>Subjects of Cross-Disciplinary Units</b>							
Communication	67.5	1.5	1.5	1.5	7.5	3.0	3.0
English	-	-	-	-	-	-	-
<b>Cross-Disciplinary Units Totals</b>	<b>67.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>7.5</b>	<b>3.0</b>	<b>3.0</b>
<b>TOTALS</b>	<b>382.5</b>	<b>16.5</b>	<b>4.5</b>	<b>4.5</b>	<b>367.5</b>	<b>17.0</b>	<b>30.0</b>

Personal work will be required in the form of presentations.

## Semester 2

Subjects	Class Hours (VHG)	Weekly Lecture Hours	Weekly Tutorial Hours	Weekly Practical Hours	Personal Work Hours	Coefficient	Credits
<b>Subjects of Core Units</b>							
Process Engineering and Basic Industrial Equipment (1)	67.5	3	1.5	-	82.5	3.0	6
Process Engineering and Basic Industrial Equipment (2)	67.5	3	1.5	-	82.5	3.0	6
Functional Properties of Milk Components	67.5	3	1.5	-	82.5	3.0	6
Packaging and Biopolymers	67.5	3	1.5	-	82.5	3.0	6
<b>Core Units Totals</b>	<b>270</b>	<b>13.5</b>	<b>6</b>	<b>0</b>	<b>330</b>	<b>12.0</b>	<b>24</b>
<b>Subjects of Methodology Units</b>							
Sensory Evaluation Methods for Dairy Products	22.5	1.5	-	-	27.5	1.0	2
Applied Statistics	22.5	1.5	-	-	27.5	1.0	2
<b>Methodology Units Totals</b>	<b>45</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>55</b>	<b>2.0</b>	<b>4</b>
<b>Subjects of Discovery Units</b>							
Computer Programming	22.5	1.5	-	-	2.5	1.0	1.0
<b>Discovery Units Totals</b>	<b>22.5</b>	<b>1.5</b>	<b>0</b>	<b>0</b>	<b>2.5</b>	<b>1.0</b>	<b>1.0</b>
<b>Subjects of Cross-Disciplinary Units</b>							
Legislation	22.5	1.5	-	-	2.5	1.0	1.0

<b>Subjects</b>	<b>Class Hours (VHG)</b>	<b>Weekly Lecture Hours</b>	<b>Weekly Tutorial Hours</b>	<b>Weekly Practical Hours</b>	<b>Personal Work Hours</b>	<b>Coefficient</b>	<b>Credits</b>
<b>Cross-Disciplinary Units Totals</b>	<b>22.5</b>	<b>1.5</b>	<b>0</b>	<b>0</b>	<b>2.5</b>	<b>1.0</b>	<b>1.0</b>
<b>TOTALS</b>	<b>360</b>	<b>19.5</b>	<b>6</b>	<b>0</b>	<b>390</b>	<b>16.0</b>	<b>30.0</b>

Internship: One-month mandatory internship in a dairy plant (Technology and Laboratory).

### Semester 3

<b>Subjects</b>	<b>Class Hours (VHG)</b>	<b>Weekly Lecture Hours</b>	<b>Weekly Tutorial Hours</b>	<b>Weekly Practical Hours</b>	<b>Personal Work Hours</b>	<b>Coefficient</b>	<b>Credits</b>
<b>Subjects of Core Units</b>							
Technology of Drinking Milk	67.5	3	-	1.5	82.5	3.0	6
Technology of Fermented Dairy Products and Dairy Desserts	67.5	3	-	1.5	82.5	3.0	6
Cheese Technology (1)	67.5	3	-	1.5	82.5	3.0	6
Cheese Technology (2)	45	3	-	-	55	2.0	4
<b>Core Units Totals</b>	<b>247.5</b>	<b>12</b>	<b>0</b>	<b>4.5</b>	<b>302.5</b>	<b>11.0</b>	<b>22</b>
<b>Subjects of Methodology Units</b>							
Automation and Regulation in the Dairy Industry	67.5	3	1.5	-	82.5	3.0	6
Traditional Algerian Dairy Products and Labelling	-	-	-	-	-	-	-
<b>Methodology Units Totals</b>	<b>67.5</b>	<b>3</b>	<b>1.5</b>	<b>0</b>	<b>82.5</b>	<b>3.0</b>	<b>6</b>
<b>Subjects of Discovery Units</b>							
Artificial Intelligence	22.5	1.5	-	-	2.5	1.0	1.0
<b>Discovery Units Totals</b>	<b>22.5</b>	<b>1.5</b>	<b>0</b>	<b>0</b>	<b>2.5</b>	<b>1.0</b>	<b>1.0</b>

Subjects	Class Hours (VHG)	Weekly Lecture Hours	Weekly Tutorial Hours	Weekly Practical Hours	Personal Work Hours	Coefficient	Credits
<b>Subjects of Cross-Disciplinary Units</b>							
Entrepreneurship	22.5	1.5	-	-	2.5	1.0	1.0
<b>Cross-Disciplinary Units Totals</b>	<b>22.5</b>	<b>1.5</b>	<b>0</b>	<b>0</b>	<b>2.5</b>	<b>1.0</b>	<b>1.0</b>
<b>TOTALS</b>	<b>360</b>	<b>18</b>	<b>1.5</b>	<b>4.5</b>	<b>390</b>	<b>16.0</b>	<b>30.0</b>

## Semester 4

**Field:** Natural and Life Sciences (SNV)

**Program:** Food Sciences

**Specialization:** Milk and Dairy Products Processing Technology

Internship in a company, validated by a thesis and an oral defense.

Subjects	Class Hours (VHG)	Weekly Lecture Hours	Weekly Tutorial Hours	Weekly Practical Hours	Personal Work Hours	Coefficient	Credits
<b>Subjects of Core Units</b>							
Personal Work / Thesis (1)	67.5	1.5	3	-	82.5	3.0	6
Personal Work / Thesis (2)	67.5	1.5	3	-	82.5	3.0	6
Personal Work / Thesis (3)	67.5	1.5	3	-	82.5	3.0	6
<b>Core Units Totals</b>	<b>202.5</b>	<b>4.5</b>	<b>0</b>	<b>9</b>	<b>165</b>	<b>9.0</b>	<b>18</b>
<b>Subjects of Methodology Units</b>							
Company Internship (1)	67.5	1.5	3	-	82.5	3.0	6
Company Internship (2)	37.5	1.5	1	-	37.5	2.0	4
<b>Methodology Units Totals</b>	<b>105</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>120</b>	<b>5.0</b>	<b>10</b>

<b>Subjects</b>	<b>Class Hours (VHG)</b>	<b>Weekly Lecture Hours</b>	<b>Weekly Tutorial Hours</b>	<b>Weekly Practical Hours</b>	<b>Personal Work Hours</b>	<b>Coefficient</b>	<b>Credits</b>
<b>Subjects of Discovery Units</b>							
Seminars	45	1.5	-	1.5	5	2.0	2.0
<b>Discovery Units Totals</b>	<b>45</b>	<b>1.5</b>	<b>0</b>	<b>1.5</b>	<b>5</b>	<b>2.0</b>	<b>2.0</b>
<b>Subjects of Cross-Disciplinary Units</b>							
<i>(No specific subjects listed)</i>	-	-	-	-	-	-	-
<b>Cross-Disciplinary Units Totals</b>	-	-	-	-	-	-	-
<b>TOTALS</b>	<b>375</b>	<b>9</b>	<b>0</b>	<b>14.5</b>	<b>292.5</b>	<b>17.0</b>	<b>30.0</b>

## Global Summary of the Program

(Include total class hours broken down by type – lectures, tutorials, practicals – over the 4 teaching semesters, and by type of UE)

<b>Class Hours (VH)</b>	<b>Core Units (UEF)</b>	<b>Methodology Units (UEM)</b>	<b>Discovery Units (UED)</b>	<b>Cross-Disciplinary Units (UET)</b>	<b>Total</b>
<b>Lectures (Cours)</b>	607.5	180	90	67.5	<b>945</b>
<b>Tutorials (Travaux Dirigés - TD)</b>	135	22.5	0	22.5	<b>180</b>
<b>Practicals (Travaux Pratiques - TP)</b>	225	82.5	22.5	22.5	<b>352.5</b>
<b>Personal Work (Travail personnel)</b>	1072.5	340	12.5	15	<b>1440</b>
<b>Total</b>	<b>2100</b>	<b>625</b>	<b>125</b>	<b>150</b>	<b>2917.5</b>
<b>Credits</b>	<b>84</b>	<b>25</b>	<b>5.0</b>	<b>6.0</b>	<b>120</b>
<b>% of credits per Unit Type</b>	<b>70.00%</b>	<b>20.83%</b>	<b>4.17%</b>	<b>5.00%</b>	<b>100.00%</b>