

# Master Europeo en Alimentación, Nutrición y Metabolismo

## Basic Skills: BS

- BS6 Possess and understand knowledgeable facts that serve as a basis or opportunity for being original in the development and/or application of ideas, frequently within the context of research.
- BS7 The students will be able to apply acquired knowledge and problem solving abilities to fields outside this program, including that which is new and scarcely known, within a more ample or multidisciplinary context related to their field of work.
- BS8 The students will be able to integrate concepts and manage the complex task of drawing valid conclusions from information which, in spite of being incomplete or limited, includes reflections regarding social and ethical responsibilities linked to the application of their knowledge, specific concepts and common sense.
- BS9 The students will learn to relay their conclusions -and the most recent facts and reasoning supporting said conclusions- to specialized personnel and to the general public in a clear and precise manner.
- BS10 The students will have acquired learning abilities that will permit them to continue studying in a self-directed and autonomous manner.

## General Skills: GS

- GS1 Adequately elaborate, and with a certain degree of originality, written compositions or motivated arguments, write up plans, work projects or scientific articles or formulate reasonable hypotheses.
- GS2 Present ideas, procedures or research reports publically, transmit emotions and enthusiasm or assess persons and organizations.
- GS3 Skillfully carry out oral and written presentations in diverse professional areas (specialized, education, and communications) and in both the Spanish and English languages.
- GS4 With critical and decisive judgment, select specialized scientific literature.
- GS5 Learn and understand the phases and basis of applying the scientific method.
- GS6 Learn team work, forming part of a research team and potentiate the ability to integrate and adapt to a multidisciplinary group.



### Specific Skills: SS

- SS1 To acquire more specific updated knowledge in Nutrition, Health and Food Sciences.
- SS2 To develop skills for using databases and reference literature related to Food Sciences.
- SS3 To adequately propose, design and develop research projects of interest in the field.
- SS4 To learn the ethical implications that research requires in the one's professional field.
- SS5 To apply the principal statistical and epidemiological tests used in research on topics regarding Health Sciences.
- SS6 To learn the relationship between the different physiological and pathological situations from a metabolic, molecular and genetic standpoint.
- SS7 To assume the existing relationship between Nutrition and Health, and the importance of diet in the treating and prevention of diseases.
- SS8 To learn the basic bioactive components of food and their implication in health.
- SS9 To offer advanced education in Health and Food Sciences related to different food sectors which permit the student to become better acquainted with everything concerning these areas.
- SS10 To contribute to the development of new technologies to be applied in the area of Health and Food Sciences.

#### Specific Skills of Orientation: SSO

#### Academic Orientation

- SSO1 To learn the current, applied perspective of different physiological and/or pathological situations related to food.
- SSO2 To become aware of and learn to use the necessary tools for the evaluation of the nutritional state of an individual and its interpretation in health and in diseases.
- SSO3 To bring the student closer to the professional working area within the field of Nutrition, Health, and Food Sciences.
- SSO4 To delve deeper in the updated nutritional requirements and dietetic recommendations in the diverse stages of life and in different physiopathological situations.



- SSO5 To learn the current perspective of the prevention and treatment of chronic diseases related to food.
- SSO6 To present updated information regarding the composition and properties of diverse foods.
- SSO7 To develop skills in the search for and interpretation of regulatory food legislation.

#### **Research Orientation**

- SSO8 Acquire skills in handling animals, applying current legislation and ethical and deontological principles in relation to the number of routine procedures carried out on experimentation animals.
- SSO9 Acquire the necessary technical skills for obtaining precise and reproducible results when carrying out standard physicochemical techniques in food and health research laboratories.
- SSO10 Acquire advanced knowledge with regard to designing, carrying out and evaluating experiments in accordance with biosafety norms.
- SSO11 Delve deeper in the updated knowledge of techniques and methodologies normally used in research regarding food toxicology
- SSO12 Learn the physicochemical basics of the different types of chromatographies and be capable of applying them to a practical case.
- SSO13 Understand the basic principles, methodology and possible applications of the "omic" techniques in nutrition and health, and learn how to use the computer software tools and necessary programs in this field.
- SSO14 Learn the potential of the nanoparticles and microparticles such as transport systems for ingredients, nutrients, probiotics and other compounds for fortifying, supplementing and obtaining functional foods.
- SSO15 Learn the basics for using cell cultures in research as well as the requirements from the following standpoints: infrastructure, equipment, safety, etc., to be considered in this methodology.
- SSO16 Delve deeper in the molecular mechanisms and metabolic routes involved in obesity and related complications.