

Are you interested in the fascinating world of food and would like to learn more about how it is chemically composed? Then the Food Chemistry degree program is just right for you!

As a food chemist, you will immerse yourself in the complex science of food. You will study the composition, quality, safety and human health impact of food. In doing so, you will work with state-of-the-art analytical methods and technologies to examine foods for their constituents, identifying potential contaminants or allergens, for example.

How do you track down olive oil counterfeiterers? How much antibiotic residue is in chicken meat? Is spinach really so healthy? And how is the flavor created in the production of chocolate? Food chemists are experts on the chemical composition of food and its ingredients. They investigate changes that occur during the production, storage or processing of foods and check the food purity, quality and safety.

In addition to the control of actual foodstuffs, food chemists are also responsible for the analysis of drinking water, tobacco and cosmetic products, animal feed and everyday articles that come into contact with the human body or with food (e.g. packaging materials or toys).

Understanding how individual ingredients affect the body and the environment is also a key aspect of the degree program Food Chemistry. The Food Chemistry degree program is a practice-oriented program which includes theoretical and practical courses in equal parts. In addition, several excursions to various companies and institutions provide opportunities to contact future employers, gain insights into industrial practice and get to know the broad field of activity of a food chemist. At this point content of an external provider (source: YouTube) is integrated. When displaying, data may be transferred to third parties or cookies may be stored, therefore your consent is required.

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Bewerbung für Studiengänge mit NC

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The degree program is divided into two sections: Basic studies (semesters 1-4) and main studies (semesters 5-9). After graduation, you will be entitled to use the professional title "Food Chemist".

1st-4th semester: Basic studies

During the first four semesters, you will acquire basic scientific knowledge in biochemistry, biology, chemistry, mathematics, and physics. The theory lectures will be deepened by practical courses in biochemistry, biology, chemistry, and physics, with focus on the courses in chemistry.

5th-8th semester: Main studies

In the main study period, you will mainly deal with food chemistry topics, such as food ingredients, chemical reactions within the foods and manufacturing processes. In various Food Chemistry practical courses, you will have ample opportunity to apply basic techniques as well as state-of-the-art bio-analytical and instrumental methods yourself. In addition, you will attend lectures and practical courses, i.a. in the subjects of nutritional physiology, food technology, food microbiology, food law, biotechnology, toxicology, forensic analysis, and quality management. You can find more impressions from the degree program (in German only) in Studium > Department Chemie und Pharmazie (fau.de). Every semester, field trips are scheduled to industrial plants and control authorities covering the sectors food and commodities and also forensic analytics. Here you

can experience how food production and monitoring is done in practice and come in contact with relevant companies.

9th semester: Final thesis

In the 9th semester you will complete a scientific thesis on a modern research topic. You will start with literature research followed by scientific experiments on the topic. Finally, the results will be summarized in a scientific thesis. If desired, you can work on your final thesis at another research institution in Germany or abroad.

As a food chemist, you are not only in high demand on the job market, you also have a wide range of career possibilities.

Food chemists often work for supervisory authorities, e.g. as officials at the State Office for Health and Food Safety, where they check the quality and safety of food that is marketed by manufacturers or offered in restaurants. They also play a key role in dealing with food crises, such as the recent scandal involving dioxins in eggs or the "melamine scandal" and in the uncovering of food fraud.

Food chemists also work in the food industry to ensure product quality and product development.

Outside the food sector, you can also work in the pharmaceutical and cosmetics industry, where you will be involved in quality control and product development. Due to the versatility of the Food Chemistry degree course and their outstanding chemical-analytical know-how, food chemists are also in demand in the field of medical analysis or drug and doping control, e.g. at the State Criminal Police Office or the National Anti Doping Agency of Germany.

Are you more interested in research? Food chemists also have good prospects at universities and scientific institutions, such as the Fraunhofer-Gesellschaft or the Max Rubner Institute, both within the food sector and beyond.

Further information and the latest salary survey can be found at: After graduating (ag-jlc.de).

After the second stage of the examination, you can complete a practical year at a supervisory authority, e.g. the Bavarian State Office for Health and Food Safety. Initially, you will work in food inspection and accompany food inspectors on their hygiene inspections in restaurants. In addition, you will deepen your knowledge of the basics of food law.

The practical year is followed by the third examination section. After passing, you will be awarded the title of "State-certified Food Chemist".

As a rule, graduation from the third examination section is a prerequisite for being employed by supervisory authorities, e.g. the State Office for Health and Food Safety.

15.07.

Our Student Advice and Career Service (IBZ) is the central point of contact for all questions about studying and starting a degree programme. Our Student Service Centres and subject advisors support you in planning your studies.

Degree: State examination (except teaching degree)

Duration of studies in semester: 9

Start of degree program: Winter semester

Study location: Erlangen

Number of students: 50-150

Subject group: Mathematics, Natural sciences

Teaching language: completely in German

Admission Requirements: With NC

Admission requirements (first semester): With NC

Admission requirements (higher semester): With NC

Application deadline winter semester: 15.07.