



Continued  
Professional  
Development

DIPLOMA



# IFEAT ACADEMY

# UNIT 1:

## FOUNDATION CHEMISTRY AND BIOCHEMISTRY FOR THE AROMA TRADES

**16 Credits**

**160 Learning Hours**

**Unit Fee**

*IFEAT Members: £1,100*

*Non-Members: £1,350*

**Apply Here**

*ifeat.academy*

### Unit Overview

Discover essential chemistry and biochemistry concepts foundational to perfumery and flavour creation in this comprehensive online unit. Covering molecular structures, chemical reactions, and biological processes, the unit delves into the historical development and industrial significance of aroma chemistry. You will explore key reactions and mechanisms, the biochemistry of aroma compounds, and advanced analytical techniques through interactive content. The unit also introduces ethical and sustainable practices, focusing on renewable resources and regulatory compliance, equipping you for advanced studies or careers in the global aroma industry.

### Further Information

 [education@ifeat.org](mailto:education@ifeat.org)

 [ifeat.academy](http://ifeat.academy)

 [ifeat.org](http://ifeat.org)



The IFEAT Academy is endorsed by the following:



The Department of Food and  
Nutritional Sciences



International Fragrance  
Association UK



The UK Flavour  
Association



British Society  
of Flavourists



Perfumer & Flavorist+



British Society  
of Perfumers



American Society  
of Perfumers

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## FOUNDATION CHEMISTRY AND BIOCHEMISTRY FOR THE AROMA TRADES

### What's included?



Flexible Learning



Academic Support



Interactive

## Unit Aims

By the end of the unit you will be able to:



- Apply a comprehensive understanding of fundamental concepts in chemistry and biochemistry relevant to the aroma trades
- Demonstrate practical skills and knowledge in the chemistry of aromatic compounds, their interactions, and applications in the aroma trades
- Evaluate the ethical and sustainable practices in the production and application of aroma compounds

## UNIT LEARNING OUTCOMES



Explain atomic structure, periodicity, and the nature of different types of chemical bonds.



Describe the structure, nomenclature, and functional groups of key organic compounds, including isomers and various important chemical groups



Apply principles of solubility, surfactants, emulsions, micelles, detergency, and colloids in the formulation and analysis of aromatic products



Explain the principles of chemical reactivity, energy exchange, kinetics, equilibrium, catalysts, and the types of organic reactions, with specific applications to acid/base reactions

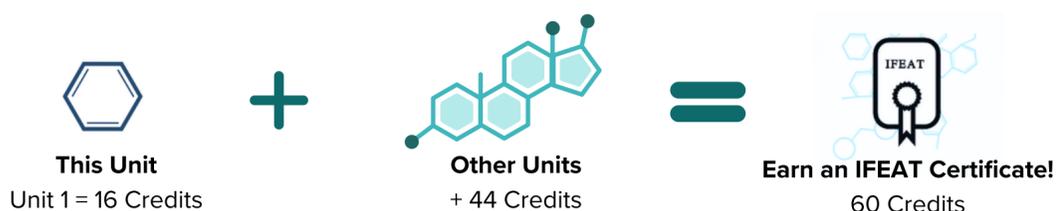


Describe fundamental biochemical processes, basic botany concepts, and the principles of green chemistry and sustainability as they apply to the aroma trades

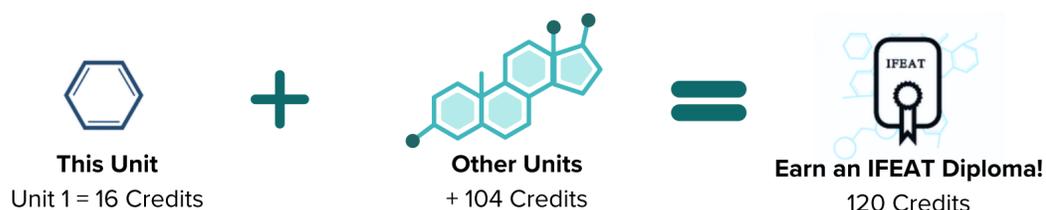


Integrate theoretical chemical and biochemical knowledge with practical applications in the aroma trades, demonstrating an understanding of the importance of sustainable practices

## Combine units for an IFEAT Certificate



## Combine units for an IFEAT Diploma



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