



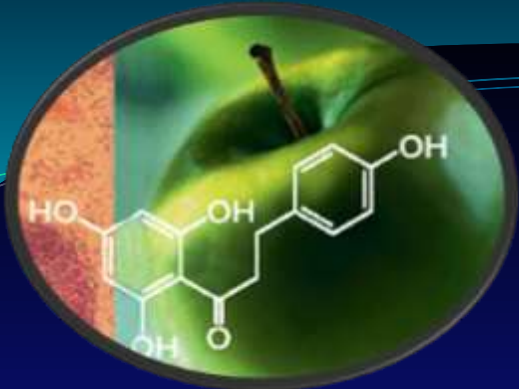
30 Hours Add-on Certificate
Course
For U.G students with
Science background

Blended
Mode

On
Chemistry for Entrepreneurship and Production

Organised by Department of Chemistry

Government Girls' General Degree College
7, Mayurbhanj Road, Kolkata - 23



**Food
Chemistry
and
Nutrition**

**Cleaning
Agents**

**Chemistry for
Entrepreneurship
and Production**

**Disinfectants
and
Sanitizers**

Cosmetics



Course Details:

Duration: 6 Months

Date of commencement: 24.09.2024

Date of completion: 24.03.2025

Total: 30 Hours

Theoretical: 16 Hours

Hands on/ Practical: 8 Hrs

Assignments and Seminars: 6 Hours



Objectives & Career Opportunities:

After completion of this course, students will have following job opportunities –

- Hand-on practical understanding on adulteration in various food types and the brief knowledge about Food Laws in India give them chances for jobs as Food Inspectors in various Food Industry
- Set-up their own manufacturing industries for cleaning agents
- Get placed in Chemical and pharmaceutical industries
- Get placed as manufacturing assistant in Cosmetic industries.
- Get placed in quality control department of various chemical industries
- Can join as research trainee in R& D of various industries
- Develop sustainable entrepreneurship

Coordinator



Dr.Mumu Chakraborty
Head
Department of Chemistry
Government Girls' General Degree College

Resource Persons

- Prof.Shouvik Chattopadhyay
Department of Chemistry
Jadavpur University
- Dr.Debjani Sengupta
Department of Community Medicine
Calcutta National Medical College
- Dt.Arпита adhikari
Dietician
All India Institute of Hygeine & Public Health
- Dr.Mumu Chakraborty
Head, Department of Chemistry
Government Girls' General Degree College

Syllabus

Theoretical

Module 1:

- Major ingredients of naturally occurring and synthetic food items
- Relation between nutritional value of food with its chemical composition
- Nutrition in Critical care
- Awareness about ‘Rashtriya Poshan Maah’

Module 2:

- Effect of toxic chemicals in everyday life
- Composition and preparation of hand sanitizer
- Composition and preparation of soap

Module 3:

- Composition of different types of cosmetics available in market
- Chemistry behind the preparation of perfume, lipsticks, powder
- Preparation of detergents and other cleaning agents

Practical

Module 4:

- Preparation of hand sanitizer in laboratory

Module 5:

- Preparation of Soap in laboratory

Evaluation

By

- Seminar
- Power point presentation
- Poster presentation on given topic
- Viva-voce



References

- **Bowes and Church's Food Values of Portions Commonly Used** by Jean A. T. Pennington; Judith Spungen
- **Fermented Foods and Beverages of the World** by Jyoti Prakash Tamang
- **Kitchen Chemistry** by Ted Lister; Heston Blumenthal
- **Unprocessed: How the Food We Eat Is Fuelling Our Mental Health Crisis** by Kimberley Wilson
- **Nutrition and Dietetics** |5th Edition. by Shubhangini A Joshi
- **Handbook of Industrial Chemistry: Organic Chemicals, 1st Edition** Mohammad Farhat Ali, Bassam M. El Ali, James G. Speight
- Joan Yau, Overview of chemical hazards, *Food Safety Focus*, 4th Issue, Nov.2006.
- Koren,G.,Matsui,D.,Bailey,B. DEET-based insect repellents: safety implicationsfor children and pregnant and lactating women. *CMAJ* • AUG. 5, 2003; 169 (3);209-212.