

University of Mumbai,

ADD On Course in Nutrition for Exercise & Fitness

Name of the Course: Add On Course in “Nutrition for Exercise & Fitness

1. **Vision:** To develop professionals with expertise in exercise and fitness nutrition management to cater to the ever increasing need in the fitness and wellness industry.
2. **Mission:** To equip students with theoretical knowledge and impart practical training as envisaged in the vision. Thus enabling the students to acquire additional applied skills while pursuing the fulltime programme / occupation.
3. **Objectives of the course :**
 - i. To introduce a career oriented and skill enhancing course on nutrition for fitness
 - ii. To impart knowledge regarding importance of nutrition and exercise for physical, psychological, social and spiritual fitness of an individual.
 - iii. To impart and develop intellectual as well as physical skills among the students in the planning and execution of exercise and nutritional principles for fitness management.
 - iv. To understand the importance of alternative therapies in the overall fitness of an individual.
 - v. To enable the students develop entrepreneurial abilities in the field of fitness.
4. **Eligibility:** B.Sc. Home Science, B.Sc Chemistry, B.Sc Biological Sciences (Botany, Zoology, Biochemistry, Microbiology, Life Science, Biotechnology, Biophysics)
5. **Intake capacity :** 20 candidates per batch
6. **Duration:** 9 months + 3 months internship

Three days a week with session of three hours.

8. Credits: 4 credits

9: Fees: Rs 12,000/- (Twelve thousand per student)

Honorarium: 500 Rs per Clock Hour: theory/ Practical

Centre Incharge: Rs 10,000/- per Month (Additional Charge)

Contents:

Module I

1.1 Introduction to principles of nutrition

1.2 Physiology of Exercise

Musculo skeletal anatomy – muscle fiber types, muscle contraction, strength power and endurance, neuroendocrine, respiratory and cardiovascular systems in exercise. Energy systems and exercise – ATP, CP, aerobic pathway, anaerobic pathway (review)

1.3 Carbohydrate and Exercise/ Sports Performance

1.4 Protein and Exercise/ Sports Performance

1.5 Fats and Exercise/ Sports Performance

1.6 Vitamins and Minerals and Exercise/ Sports Performance

1.7 Hydration

Module II

2.1 Principles of diet planning

2.2 Principles of diet planning for and different exercise/sports conditions

i. Pre game meals

ii. Post Game meals

iii. During meals

iv. On-season and Off-season meals

2.3 Ergogenic aids

Module III

3.1 Fitness Assessment (Anthropometry, assessment of physical and functional capacity)

3.2 Psychological Assessment

Module IV

4.1 Role of exercise and fitness in prevention of disease and health promotion

4.2 Alternative forms of fitness- Yoga, Pilates, Kickboxing, Boot Camps

Module V

Practicals

5.1 Fitness Assessment (Anthropometry, assessment of physical and functional capacity)

5.2 Planning of diets:

i. Pre game meals

ii. Post Game meals

iii. During meals

iv. On-season and Off-season meals

5.3 Supplements and ergogenic aids

Visit to a Gym/ Fitness Centre/ Rehabilitation centre

Internship in a gym/ Fitness Centre/ Rehabilitation centre for 3 months

