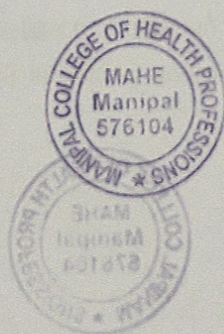


## 2. PROGRAM EDUCATION OBJECTIVES (PEOs)

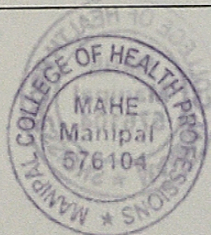
The overall objective of the learning outcome-based curriculum framework (LOCF) for BSc. Clinical Nutrition and Dietetics Program are as follows:

PEO No.	Education Objective
PEO 1	Students will be able to use their fundamental knowledge and clinical competence in various scientific aspects of food as and when required to achieve professional excellence.
PEO 2	Students will demonstrate strong and well defined clinical / practical skills in understanding the functions and role of nutrients their requirements and effects of deficiency, excess and importance of nutrients in recommended dietary allowances.
PEO 3	Students will be able to practice the profession with highly professional and ethical attitude, strong communication skills, and to work in an inter-disciplinary team so as to translate the science of nutrition in health and diseases into practical information.
PEO 4	Students will be able to use interpersonal and collaborative skills to identify, assess and formulate problems and execute the solution to assess nutritional status of individuals in various life-cycle stages and determine nutrition-related conditions and diseases by applying knowledge of metabolism and nutrient functions, food sources, and physiologic systems.
PEO 5	Students will be able to imbibe the culture of research, innovation, entrepreneurship and incubation through evidence-based medical nutrition therapy.
PEO 6	Students will be able to participate in lifelong learning process for a highly productive career and will be able to relate the concepts of trends and issues in the discipline of nutrition, and translate this information into education, and training program towards serving the cause of the society.



### 3. GRADUATE ATTRIBUTES

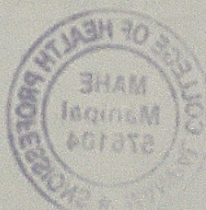
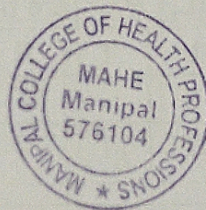
S No.	Attribute	Description
1	<b>Professional Knowledge</b>	Demonstrate <b>scientific knowledge and understanding</b> to work as a health care professional
2	<b>Clinical / Laboratory / practical skills</b>	Demonstrate <b>Clinical / practical skills</b> in order to implement the preventive, assessment and management plans for quality health care services
3.	<b>Communication</b>	Ability to communicate effectively and appropriately in writing and orally to patients/clients, care-givers, other health professionals and other members of the community
4.	<b>Cooperation/Team work</b>	Ability to work effectively and respectfully with interdisciplinary team members to achieve coordinated, high quality health care
5.	<b>Professional ethics</b>	Ability to identify ethical issues and apply the ethical values in the professional life
6.	<b>Research / Innovation-related Skills</b>	A sense of inquiry and investigation for raising relevant and contemporary questions, synthesizing and articulating.
7.	<b>Critical thinking and problem solving</b>	Ability to think critically and apply once learning to real-life situations
8.	<b>Reflective thinking</b>	Ability to employ reflective thinking along with the ability to create the sense of awareness of one self and society
9.	<b>Information/digital literacy</b>	Ability to use ICT in a variety of learning situations
10.	<b>Multi-cultural competence</b>	Ability to effectively engage in a multicultural society and interact respectfully
11.	<b>Leadership readiness/qualities</b>	Ability to respond in an autonomous and confident manner to planned and uncertain situations, and should be able to manage themselves and others effectively
12.	<b>Lifelong Learning</b>	Every graduate to be converted into lifelong learner and consistently update himself or herself with current knowledge, skills and technologies. Acquiring Knowledge and creating the understanding in learners that learning will continue throughout life.



**5. PROGRAM OUTCOMES (POs):**

After successful completion of Bachelor / BSc Clinical Nutrition and Dietetics program students will be able to:

PO No.	Attribute	Competency
PO 1	<b>Professional knowledge</b>	Possess and acquire <b>scientific knowledge</b> to work as a health care professional
PO 2	<b>Clinical/ Technical skills</b>	Demonstrate and possess <b>clinical skills</b> to provide quality health care services
PO 3	<b>Team work</b>	Demonstrate <b>team work skills</b> to support shared goals with the interdisciplinary health care team to improve societal health
PO 4	<b>Ethical value &amp; professionalism</b>	Possess and demonstrate <b>ethical values and professionalism</b> within the legal framework of the society
PO 5	<b>Communication</b>	<b>Communicate effectively</b> and appropriately with the interdisciplinary health care team and the society
PO 6	<b>Evidence based practice</b>	Demonstrate high quality <b>evidence based practice</b> that leads to excellence in professional practice
PO 7	<b>Life-long learning</b>	Enhance knowledge and skills with the use of advancing technology for the <b>continual improvement</b> of professional practice
PO 8	<b>Entrepreneurship, leadership and mentorship</b>	Display <b>entrepreneurship, leadership and mentorship</b> skills to practice independently as well as in collaboration with the interdisciplinary health care team



**6. COURSE STRUCTURE, COURSE WISE LEARNING OBJECTIVE, AND COURSE OUTCOMES (COs)**
**SEMESTER - I**

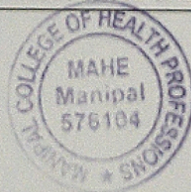
Course Code	Course Title	Credits Distribution (L,T,P,CL are hours/ week)					Marks Distribution		
		L	T	P	CL	CR	IAC	ESE	Total
ANA1103	Anatomy	3	-	-	-	3	30	70	100
PHY1103	Physiology	2	-	-	-	2	30	70	100
CSK1001	Communication skills	2	-	-	-	2	100	-	100
EIC1001	Environmental science & indian constitution	2	-	-	-	2	100	-	100
CND1101	Clinical correlation of food and nutrition - I	3	1	-	-	4	50	50	100
CND1161	Therapeutic practice in food and nutrition - I	-	-	4	9	5	100	-	100
CND1121	Basic computer application	1	-	2	-	2	100	-	100
<b>Total</b>		<b>13</b>	<b>1</b>	<b>6</b>	<b>9</b>	<b>20</b>	<b>510</b>	<b>190</b>	<b>700</b>

**NOTE:** ESE for ANA1103 & PHY1103 will be conducted for 50 marks and normalized to 70 marks for grading.  
 ESE for CND1101 will be conducted out of 100 and normalized to 50 marks.

**SEMESTER - II**

Course Code	Course Title	Credits Distribution (L,T,P,CL are hours/ week)					Marks Distribution		
		L	T	P	CL	CR	IAC	ESE	Total
BIC1201	Biochemistry	3	-	-	-	3	30	70	100
CND1201	Clinical correlation of food and nutrition - II	3	1	-	-	4	50	50	100
CND1261	Therapeutic practice in food and nutrition - II	-	-	4	9	5	100	-	100
CND1202	Introduction to food science - I	3	1	-	-	4	50	50	100
CND1262	Analysis in food science - I	-	-	4	6	4	100	-	100
<b>Total</b>		<b>9</b>	<b>2</b>	<b>8</b>	<b>15</b>	<b>20</b>	<b>330</b>	<b>170</b>	<b>500</b>

**NOTE:** ESE for BIC1201 will be conducted for 50 marks and normalized to 70 marks for grading.  
 ESE for CND1201, CND1202 will be conducted out of 100 and normalized to 50 marks.



**SEMESTER - III**

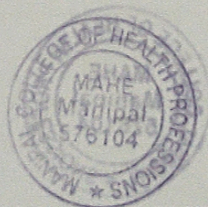
Course Code	Course Title	Credits Distribution (L, T, P, CL are hours/ week)					Marks Distribution		
		L	T	P	CL	CR	IAC	ESE	Total
MCB2103	Microbiology	3	-	-	-	3	30	70	100
CND2101	Medical nutrition therapy - I	3	1	-	-	4	50	50	100
CND2161	Clinical practice in medical nutrition therapy	-	-	4	6	4	100	-	100
CND2102	Introduction to food science - II	2	-	-	-	2	50	50	100
CND2162	Analysis in food science - II	-	-	4	6	4	100	-	100
*** ****	Open elective - I	-	-	-	-	3	-	-	S/NS
<b>Total</b>		<b>8</b>	<b>1</b>	<b>8</b>	<b>12</b>	<b>20</b>	<b>330</b>	<b>170</b>	<b>500</b>

**NOTE:** ESE for MCB2103 will be conducted for 50 marks and normalized to 70 marks for grading. ESE for CND2101 and CND2102 will be conducted out of 100 and normalized to 50 marks.

**SEMESTER - IV**

Course Code	Course Title	Credits Distribution (L, T, P, CL are hours/ week)					Marks Distribution		
		L	T	P	CL	CR	IAC	ESE	Total
BST3201	Biostatistics & research methodology	3	-	-	-	3	30	70	100
CND2201	Medical nutrition therapy - II	3	1	-	-	4	50	50	100
CND2261	Clinical practice in medical nutrition therapy - II	-	-	4	12	6	50	50	100
CND2202	Quality control	3	1	-	-	4	50	50	100
CND****	Program elective - I	-	-	-	-	3	50	50	100
<b>Total</b>		<b>9</b>	<b>2</b>	<b>4</b>	<b>12</b>	<b>20</b>	<b>230</b>	<b>270</b>	<b>500</b>

**NOTE:** ESE for BST3201 will be conducted for 100 marks and normalized to 70 marks for grading. ESE for CND2201 and CND2202 will be conducted out of 100 and normalized to 50 marks.



**SEMESTER – V**

Course Code	Course Title	Credits Distribution (L,T,P,CL are hours/ week)					Marks Distribution		
		L	T	P	CL	CR	IAC	ESE	Total
CND3101	Nutrition in critical care	3	1	-	-	4	50	50	100
CND3102	Clinical nutrition through life cycle - I	3	1	-	-	4	50	50	100
CND3161	Therapeutic practice in critical care nutrition & life cycle - I	-	-	4	12	6	100	-	100
CND3103	Food sanitation and hygiene	3	-	-	-	3	50	50	100
*** **	Open elective - II	-	-	-	-	3	100	-	S/NS
<b>Total</b>		<b>9</b>	<b>2</b>	<b>4</b>	<b>12</b>	<b>20</b>	<b>250</b>	<b>150</b>	<b>400</b>

**NOTE:** ESE for subjects CND3101, CND3102, CND3103 will be conducted out of 100 and normalized to 50 marks.

**SEMESTER - VI**

Course Code	Course Title	Credits Distribution (L,T,P,CL are hours/ week)					Marks Distribution		
		L	T	P	CL	CR	IAC	ESE	Total
CND3201	Clinical nutrition through life cycle - II	3	-	-	-	3	50	50	100
CND3221	Food preservation	3	-	2	-	4	50	50	100
CND3261	Therapeutic practice in nutrition through life cycle - II	-	-	2	6	3	50	50	100
CND3203	Community nutrition	3	-	-	-	3	50	50	100
CND3262	Clinical practice in community nutrition	-	-	4	6	4	100	-	100
CND ****	Program elective - II	-	-	-	-	3	50	50	100
<b>Total</b>		<b>9</b>	<b>-</b>	<b>8</b>	<b>12</b>	<b>20</b>	<b>350</b>	<b>250</b>	<b>600</b>

**NOTE:** ESE for subjects CND3201, CND3221 and CND3203 will be conducted out of 100 and normalized to 50 marks.



### Open Electives

Open elective is credited, choice-based and is graded as satisfactory / not satisfactory (S/NS). Students make a choice from pool of electives offered by MAHE institution / Online courses as approved by the department

### Program Electives

Program elective is credited and choice-based. The students make a choice from pool of electives offered by the department. The ESE is conducted for 50 marks.

Semester	Course Code	Course Title	Credit (s) Distribution (L,T,P,CL are hours/ week)				
			L	T	P	CL	CR
IV Semester	CND3241	Nutrition for special children	3	-	-	-	3
	CND3242	Dietetics and counselling	3	-	-	-	3
VI Semester	CND3243	Nutritional consideration during disasters	3	-	-	-	3
	CND3244	Eating behaviour	3	-	-	-	3

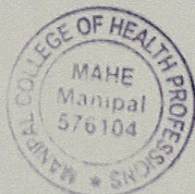
## SEMESTER - VII and VIII

Rotatory Internship (1 year, 48 hours/week)

<b>Semester VII</b>	<b>Internship - I</b>	Duration 6 months 48 hours in a week / 8 hours in a day
<b>Semester VIII</b>	<b>Internship - II</b>	Duration 6 months 48 hours in a week / 8 hours in a day

### OVERALL CREDIT DISTRIBUTION

Semester	Credit distribution					Marks Distribution		
	L	T	P	CL	CR	IAC	ESE	Total
SEMESTER - I	13	1	6	9	20	510	190	700
SEMESTER - II	9	2	8	15	20	330	170	500
SEMESTER - III	8	1	8	12	20	330	170	500
SEMESTER - IV	9	2	4	12	20	230	270	500
SEMESTER - V	9	2	4	12	20	250	150	400
SEMESTER -VI	9	-	8	12	20	350	250	600
SEMESTER - VII	-	-	-	48	NA	-	-	-
SEMESTER - VIII				48	NA	-	-	-
<b>Grand Total</b>	<b>57</b>	<b>8</b>	<b>38</b>	<b>168</b>	<b>120</b>	<b>2000</b>	<b>1200</b>	<b>3200</b>



**Internal assessment component (IAC) weightage distribution**

Theory		Practical	
Components	%	Components	%
Mid semester exam	60	Mid semester exam	60
Class seminar	20	Record submission	20
Assignments/Quiz	20	Competency in bench mark	20

Rotatory Internship	
Components	%
Case study proposal	10
Progress report	20
Work done	25
Internship report	20
Case presentation	25
<b>Total</b>	<b>100</b>

