DONG NAI TECHNOLOGY UNIVERSITY

DNTU

CURRICULUM

Major: **Biotechnology**

Level of training: **Undergraduate**

Mode of study: **Full-time**

Duration of study: **4 years**

Degree awarded: **Bachelor**

Cohort: **Cohort 21 (2025 - 2029)**

Total accumulated credits for the program: **126**

Courses marked (*) are not included in the cumulative GPA.

SEMESTER 1: 4 accumulated credits (Compulsory: 4, Elective: 0)					
Course code	**Course title**	**Credits**	**Total periods**	**Theory periods**	**Practice periods**
Compulsory courses		**4**			
CB70303	Public Speaking Skills	1	15	15	
TM70001	Introduction to Cosmetic Technology	1	15	15	
TM70005	General Biology	2	30	30	
TA70301	Key English 1 (*)	3	45	45	
TA70302	Key English 2 (*)	3	45	45	
TA70303	Key English 3 (*)	3	45	45	
TA70304	English Speaking Community (*)	2	30	30	
TN70020	Introduction to Artificial Intelligence (*)	1	15	15	
CB70107	DNTU Beginning (*)	1	15	15	
SEMESTER 2: 15 accumulated credits (Compulsory: 15, Elective: 0)					
Course code	**Course title**	**Credits**	**Total periods**	**Theory periods**	**Practice periods**
Compulsory courses		**15**			

CB70101	Marxist–Leninist Philosophy	3	45	45	
TA70305	Intensive English 1	4	60	60	
TH70001	Informatics 1	2	45	15	30
CB70304	Emotional Management Skills	1	15	15	
TM70008	General Biology Laboratory	1	30		30
XN70061	Basic Biochemistry	2	45	15	30
HH70003	General Chemistry	2	30	30	
CB70411	Swimming (*)	1	30		30
CB70401	National Defense and Security Education 1 (*)	3	45	45	
CB70402	National Defense and Security Education 2 (*)	2	30	30	
CB70403	National Defense and Security Education 3 (*)	1	30		30
CB70404	National Defense and Security Education 4 (*)	2	60		60
Physical Education (Choose 2 of 8 courses)*					
CB71412	Football	1	30		30
CB71403	Volleyball	1	30		30
CB71404	Badminton	1	30		30
CB71410	Pickleball	1	30		30
CB71413	Fitness	1	30		30
CB71406	Dancesport	1	30		30
CB71407	Basketball	1	30		30
CB71414	Martial Arts	1	30		30
SEMESTER 3: 27 accumulated credits (Compulsory: 23, Elective: 04)					
Course code	**Course title**	**Credits**	**Total periods**	**Theory periods**	**Practice periods**
Compulsory courses		**23**			
CB70102	Marxist–Leninist Political Economy	2	30	30	

CB70106	Introduction to Law	2	30	30	
TA70306	Intensive English 2	4	60	60	
TH70002	Informatics 2	2	60		60
CB70305	Communication and Relationship-Building Skills	2	30	30	
CB70205	Applied Statistics	3	45	45	
HH70001	Organic Chemistry	3	45	45	
HH70004	General Chemistry Laboratory	1	30		30
TM70006	Pharmacognosy	2	30	30	
TM70010	Microbiology and Parasitology in Aesthetics	2	30	30	
Elective courses		**4**			
CB71101	Environment and Sustainable Development	2	30	30	
CB71102	Behavioral Psychology	2	30	30	
CB71103	Psychology – Medical Ethics	2	30	30	
CB71104	Green Economy and Sustainable Development	2	30	30	
CB71105	Vietnamese Ethnic Culture and Music	2	30	30	
CB71106	History of World Civilizations	2	30	30	
SEMESTER 4: 24 accumulated credits (Compulsory: 24, Elective: 0)					
Course code	**Course title**	**Credits**	**Total periods**	**Theory periods**	**Practice periods**
Compulsory courses		**24**			
CB70103	Scientific Socialism	2	30	30	
TA70307	Intensive English 3	4	60	60	
TM70007	Basic Cosmetic Application Techniques in Aesthetic Care	2	30	30	
TM70028	Cosmetic Formulation and Ingredients	3	60	30	30
TM70014	Immunology	2	30	30	
TM70011	Emulsion Science	2	30	30	

TM70016	Skin Science	3	45	45	
TM70012	Bioactive Natural Compounds	2	30	30	
CB70206	Scientific Research Methodology	2	45	15	30
CB70307	Industrial Accident Prevention Skills	2	30	30	
SEMESTER 5: 22 accumulated credits (Compulsory: 18, Elective: 04)					
Course code	**Course title**	**Credits**	**Total periods**	**Theory periods**	**Practice periods**
Compulsory courses		**18**			
CB70104	Ho Chi Minh Ideology	2	30	30	
CB70105	History of the Communist Party of Vietnam	2	30	30	
TA70308	Intensive English 4	4	60	60	
TM70018	Cosmetic Manufacturing Technology	2	30	30	
TM70019	Advanced Cosmetic Application Techniques in Aesthetic Care	2	30	30	
HH70002	Applied Biochemical Technology	3	60	30	30
TM70031	Medicinal Plant Extraction Techniques	3	60	30	30
Elective courses (Choose 1 of the 2 tracks – 4 credits)		**4**			
Track: Biotechnology Applied in Cosmetics					
TM71002	Pharmaceutical Dosage Forms and Biopharmaceutics	2	30	30	
TM71006	Molecular Biology	2	30	30	
Track: Cosmetic Safety and Aesthetic Management					
TM71001	Cosmetic Toxicology	2	30	30	
TM71003	Nanotechnology in Cosmetics	2	30	30	
SEMESTER 6: 19 accumulated credits (Compulsory: 15, Elective: 04)					
Course code	**Course title**	**Credits**	**Total periods**	**Theory periods**	**Practice periods**
Compulsory courses		**15**			

TM70020	Cosmetic Research and Development	2	30	30	
TM70029	Cosmetic Testing	3	60	30	30
TM70033	Stem Cell Technology in Cosmetics	2	30	30	
TM70035	Specialized Internship	2	100		100
TM70040	Nutrition and Functional Foods	2	30	30	
TM70041	Cosmetic and Food Regulations	2	30	30	
CB70309	Effective and Creative Thinking Skills	2	30	30	
Elective courses (Choose 1 of the 2 tracks – 4 credits)		**4**			
Track: Biotechnology Applied in Cosmetics					
HH70022	Isolation and Purification Methods	2	30	30	
HH70018	Flavor and Fragrance Chemistry Technology	2	30	30	
Track: Cosmetic Safety and Aesthetic Management					
TM71005	Cosmetic Dermatology	2	30	30	
TM71007	Intellectual Property	2	30	30	
SEMESTER 7: 05 accumulated credits (Compulsory: 05, Elective: 0)					
Course code	**Course title**	**Credits**	**Total periods**	**Theory periods**	**Practice periods**
Compulsory courses		**5**			
TM70032	Cosmetic Quality Testing	3	60	30	30
TM70034	Good Manufacturing Practice for Cosmetics (CGMP)	2	30	30	
SEMESTER 8: 10 accumulated credits (Compulsory: 04, Elective: 06)					
Course code	**Course title**	**Credits**	**Total periods**	**Theory periods**	**Practice periods**
Professional internship, graduation internship		***4***			
TM70036	Graduation Internship	4	200		200
Graduation Thesis		***5***			

TM70037	Graduation Thesis	6	180		180
Courses in lieu of Graduation Thesis		***5***			
TM70038	Entrepreneurship and Emerging Issues in Cosmetic Technology	3	45	45	
TM70039	Graduation Seminar	3	90		90