DONG NAI TECHNOLOGY UNIVERSITY
DNTU

CURRICULUM

Major: **Information Technology**

Educational Level: **Undergraduate**

Mode of Study: **Full-time**

Duration of Study: **4 years**

Degree Awarded: **Bachelor's Degree**

Cohort: **Cohort 20 (2024 - 2028)**

Total cumulative credits for the whole program: **126**

Courses marked with (*) are not calculated into the cumulative GPA.

SEMESTER 1: 4 cumulative credits (Compulsory: 4, Elective: 0)					
Course Code	**Course Name**	**Credits**	**Total Hours**	**Theory Hours**	**Practice Hours**
Compulsory Courses		**4**			
CB70303	Public Speaking Skills	1	15	15	0
TH70102	Introduction to Information Technology	1	15	15	0
TH70103	General Informatics	2	60	0	60
TA70301	Key English 1 (**)	3	45	45	0
TA70302	Key English 2 (**)	3	45	45	0
TA70303	Key English 3 (**)	3	45	45	0
TA70304	English Speaking Community (**)	2	30	30	0

SEMESTER 2: 18 cumulative credits (Compulsory: 16, Elective: 2)					
Course Code	**Course Name**	**Credits**	**Total Hours**	**Theory Hours**	**Practice Hours**
Compulsory Courses		**16**			
CB70101	Marxist-Leninist Philosophy	3	45	45	0
CB70304	Emotional Management Skills	1	15	15	0
TA70305	Intensive English 1	4	60	60	0
CB70202	Advanced Mathematics	3	45	45	0
TH70104	Computer Architecture	2	45	15	30
TH70105	Fundamentals of Programming	3	60	30	30

Elective Courses		**2**			
PM71201	Applied Computer Graphics	2	60	0	60
TH71101	Operating Systems	2	45	15	30
SEMESTER 3: 21 cumulative credits (Compulsory: 19, Elective: 2)					
Course Code	**Course Name**	**Credits**	**Total Hours**	**Theory Hours**	**Practice Hours**
Compulsory Courses		**19**			
CB70102	Marxist-Leninist Political Economy	2	30	30	0
CB71401	Physical Education 1 - Swimming (*)	1	30	0	30
TA70306	Intensive English 2	4	60	60	0
CB70305	Communication and Relationship Building Skills	2	30	30	0
CB70106	Introduction to Law	2	30	30	0
TH70101	Applied Discrete Mathematics in Information Technology	3	45	45	0
TH70106	Computer Networks	3	60	30	30
PM70202	Programming Techniques	3	60	30	30
Elective Courses		**2**			
CB71101	Environment and Sustainable Development	2	30	30	0
CB71102	Behavioral Psychology	2	30	30	0
CB71103	Medical Ethics and Psychology	2	30	30	0
SEMESTER 4: 18 cumulative credits (Compulsory: 10, Elective: 8)					
Course Code	**Course Name**	**Credits**	**Total Hours**	**Theory Hours**	**Practice Hours**
Compulsory Courses		**11**			
CB70103	Scientific Socialism	2	30	30	0
CB70307	Industrial Accident Prevention Skills	2	30	30	0
CB70401	National Defense and Security Education (Course 1) (**)	3	45	45	0
CB70402	National Defense and Security Education (Course 2) (**)	2	30	30	0
CB70403	National Defense and Security Education (Course 3) (**)	1	30	0	30
CB70404	National Defense and Security Education (Course 4) (**)	2	60	0	60
CB71402	Physical Education 2 (*)	1	30	0	30

TA70307	Intensive English 3	4	60	60	0
PM70203	Databases	3	60	30	30
Elective Courses		**8**			
CB71104	Green Economy and Sustainable Development	2	30	30	0
CB71105	Vietnamese Traditional Culture and Music	2	30	30	0
CB71106	History of World Civilizations	2	30	30	0
TH71104	Routing and Switching	3	60	30	30
TH71103	Introduction to Data Science	3	60	30	30
PM70204	Web Design	3	60	30	30
TH71122	Introduction to Scientific Research	3	45	45	0
SEMESTER 5: 17 cumulative credits (Compulsory: 14, Elective: 3)					
Course Code	**Course Name**	**Credits**	**Total Hours**	**Theory Hours**	**Practice Hours**
Compulsory Courses		**14**			
CB70104	Ho Chi Minh Ideology	2	30	30	0
CB70105	History of the Communist Party of Vietnam	2	30	30	0
CB71405	Physical Education 3 (*)	1	30	0	30
TA70308	Intensive English 4	4	60	60	0
TH70107	Data Structures and Algorithms	3	60	30	30
PM70205	Object-Oriented Programming	3	60	30	30
Elective Courses		**3**			
TH71107	Network System Design	3	60	30	30
PM71204	Windows Programming	3	60	30	30
SEMESTER 6: 15 cumulative credits (Compulsory: 6, Elective: 9)					
Course Code	**Course Name**	**Credits**	**Total Hours**	**Theory Hours**	**Practice Hours**
Compulsory Courses		**6**			
TH70108	Database Management Systems	3	60	30	30
TH70110	Artificial Intelligence	3	45	45	0
Elective Courses		**9**			
TH71106	Web Programming	3	60	30	30
TH71112	Network Systems Administration	3	60	30	30

TH71109	Machine Learning	3	60	30	30
TH71115	Network Security	3	60	30	30
TH71117	Software Engineering	3	60	30	30
PM71206	.NET Technology	3	60	30	30
SEMESTER 7: 16 cumulative credits (Compulsory: 5, Elective: 11)					
Course Code	**Course Name**	**Credits**	**Total Hours**	**Theory Hours**	**Practice Hours**
Compulsory Courses		**5**			
TH70109	Systems Analysis and Design	3	60	30	30
TH70111	Mobile Programming	2	60	0	60
Elective Courses		**11**			
TH71110	Deep Learning	3	60	30	30
TH71111	Computer Vision	3	60	30	30
TH71116	Network Technology Special Topics	3	60	30	30
TH71113	Information Technology Project Management	2	45	15	30
TH71108	Web API	3	60	30	30
TH71118	Blockchain Technology	3	60	30	30
TH71114	E-Commerce	3	60	30	30
PM70212	Software Testing and Quality Assurance	2	45	15	30
SEMESTER 8: 16 cumulative credits (Compulsory: 8, Elective: 8)					
Course Code	**Course Name**	**Credits**	**Total Hours**	**Theory Hours**	**Practice Hours**
Compulsory Courses		**8**			
TH70112	Graduation Internship	8	30	30	0
70138	Orientation Education (**)	0	0	0	0
Elective Courses		**8**			
TH71119	Graduation Thesis	8	30	30	0
TH71120	Advanced Databases	4	90	30	60
TH71121	IoT Technology and Applications	4	90	30	60