

## NDDU VISION-MISSION STATEMENT

### VISION

Notre Dame of Dadiangas University is a Catholic, Filipino Institution of Academic Excellence established by the Marist Brothers of the Schools (*F.M.S.-Fratres Maristae a Scholis*) characterized by St. Marcellin Champagnat's ideals of simplicity, humility and quiet zeal for God's work as inspired by the Blessed Virgin Mary. The school is dedicated to the formation of persons in all levels of learning, who, as **Christian Leaders, Competent Professionals, Community-Oriented Citizens and Culture-Sensitive Individuals** will actively participate in building a peaceful and progressive nation.

### MISSION

As a **Catholic Educational Institution**, NDDU shares in the Church's mission of evangelization by integrating life and faith;

As a **Filipino Institution**, NDDU seeks to preserve Filipino Culture and propagate love of country and its people;

As an **Institution of Quality Education**, NDDU aims leadership in Curricular Programs, Multi-Disciplinary Programs, Research, and Community Service;

As a **Marist Institution**, NDDU promotes the core values of Family Spirit, Marian Spirit, Simplicity, Presence, Preference for the Least Favored, Love of Work, and Integrity of Creation; and

As a **Community-Oriented Institution**, NDDU aims to respond to the challenges of the locality it is serving: South Cotabato, Sultan Kudarat, Sarangani Province and, General Santos City (SOCKSARGEN Area).

## COLLEGE OBJECTIVES

The College of Engineering and Technology aims to:

- Educate students to become Christian leaders, competent professionals. Community-oriented citizens, and culture-sensitive individuals in order to contribute to the professional workforce in Engineering, Architecture, and Information Technology
- Serve the Engineering, Architecture, and Information Technology profession and the society through excellence in research and innovation that discovers new knowledge and enable new technologies and systems.
- Embrace a culture of service to the local, national, and international communities

For more information, please see  
The University Registrar or  
Call (083) 552 4444 local 2211,  
or visit us at  
[www.nddu.edu.ph](http://www.nddu.edu.ph)

## COURSES OFFERED

Notre Dame of Dadiangas University started operating its high school department in 1953. In 1959 the school offered the following courses: Liberal Arts, Commerce and one (1) year Secretarial course. However, NDDU endeavors to keep up with the demands of the times and with the modern trends in education, as well as to contribute to the manpower building of the General Santos community and of the country. To attain these, it now offers more programs relevant to the needs of the country. The following are the programs:

### POST GRADUATE

- Doctor in Management *major in Human Resource Management*
- Doctor of Philosophy in Education
- Doctor of Philosophy in Language Education
- Doctor of Philosophy in Science Education *major in Biology*

### GRADUATE with Accreditation Level

- Master in Business Administration (Thesis & Non-Thesis) *PAASCU Level I*
- Master in Public Administration (Thesis & Non-Thesis) *PAASCU Level I*
- Master of Arts in Education *PAASCU Level I*  
Major: *Mathematics, Teaching English as a Second Language, Guidance and Counseling, Early Childhood Education, Educational Management, Science Education, Religious Education*
- Master in Engineering Program *major in Civil Engineering*
- Master of Arts in Nursing

### UNDERGRADUATE with Accreditation Level

Five Year Courses	
• BS Architecture	• BS Electrical Engineering
• BS Civil Engineering <i>PAASCU Level II</i>	• BS Electronics and Communications Eng'g
• BS Computer Engineering	• BS Industrial Engineering <i>PAASCU Level I</i>
Four Year Courses	
• BS Accountancy <i>PAASCU Level II</i>	• BS Accounting Technology <i>PAASCU Level II</i>
• Bachelor of Arts <i>PAASCU Level IV</i> Major: <i>Economics, English, Political Science, Psychology, Communication</i>	• BS Business Administration <i>PAASCU Level IV</i> Major: <i>Business Economics, Financial Management, Marketing Management, Management Accounting</i>
• BS Biology (BSBio) <i>PAASCU Level III</i>	• BS Tourism Management
• BS Hotel and Restaurant Management	• BS Computer Science (BSCS) <i>PAASCU Level II</i>
• Bachelor of Elem. Educ. <i>PAASCU Level IV</i> Major in: <i>General Education, Pre-school Education, Special Education</i>	• Bachelor of Secondary Education <i>Level IV</i> Major in: <i>English, Biological Sciences, Mathematics, Religious Education, Music, Arts, PE and Health (MAPEH)</i>
• BS Entrepreneurship	• BS Environmental Science
• BS Information Technology <i>PAASCU Level I</i>	• BS Library & Information Science
• BS Mathematics <i>PAASCU Level IV</i>	• BS Medical Technology
• BS Nursing <i>PAASCU Level III</i>	• BS Office Administration <i>PAASCU Level IV</i>
• BS Pharmacy (BSPPharm)	

### TWO YEAR COURSES

\*Associate in Office Administration (AOA)

\*Associate in Entrepreneurship (AEn)

**K – 12 BASIC EDUCATION PROGRAM - ELEM(Level III); SECONDARY(Level II) - Lagao Campus**

**ALTERNATIVE SECONDARY EDUCATION – Lagao Campus**

**K – 12 BASIC EDUCATION PROGRAM - Espina Campus**

**NDDU TECHNICAL/VOCATIONAL COURSES - TESDA Accredited**

**MARIST TECHNICAL TRAINING PROGRAM (MTTP) - TESDA Accredited**

## College of Engineering and Technology NOTRE DAME OF DADIANGAS UNIVERSITY

*Marist Avenue, General Santos City*



# Course Catalogue

## BACHELOR OF SCIENCE IN ENTERTAINMENT AND MULTIMEDIA COMPUTING Major in Digital Animation- Technology

Effective SY 2018 – 2019

Student's Signature	
Student's Name	
Contact Number	
Email Address	

**THE FOUR-YEAR CURRICULUM LEADING TO THE DEGREE  
BACHELOR OF SCIENCE IN ENTERTAINMENT AND  
MULTIMEDIA COMPUTING (BSEMC)  
Major in Digital Animation-Technology**  
*Per CHED Memorandum Order (CMO) No. 2, Series of 2014*  
Effective SY 2018 – 2019

**COURSE DESCRIPTION**

Bachelor of Science in Entertainment and Multimedia Computing is the study and use of concepts, principles, and techniques of computing in the design and development of multimedia products and solutions. It includes various applications such as in science, entertainment, education, simulations and advertising.

The program enables the students to be knowledgeable of the whole pipeline of Game Development and Digital Animation projects. The students will acquire the independence and creative competencies to articulate project design and requirements of new projects, not necessarily based on standard templates.

**PROGRAM OUTCOMES**

At the end of the degree program, the students should:

1. Apply knowledge of mathematics, physical sciences, computing sciences to the practice of being an entertainment and multimedia computing professional;
2. Apply specialized computing knowledge in each applicable field to provide solutions in actual problems;
3. Design, build, improve, and deploy multimedia products that meet client needs within realistic constraints;
4. Use the appropriate techniques, skills and modern computing tools necessary for the practice of being a professional game developer or animator;
5. Work effectively in multi-disciplinary and multi-cultural teams;
6. Understand and assess local and global impacts of computing on society relevant to professional computing practice and subscription to accepted industry standards;
7. Understand the effects and impact of entertainment and multimedia computing projects on nature and society, and of their social and ethical responsibilities;
8. Create or use modified artefacts in consideration of intellectual property rights of the author;
9. Engage in life-long learning and acceptance of the need to keep current of the development in the specific field of specialization;
10. Demonstrate original creative outputs, innovativeness, and client-centric service; and
11. Acquire and internalize Christian values of Honesty, Punctuality, and Family spirit, among others, anchored on the ideals of Saint Marcellin Champagnat and Mother Mary in the practice of Information Technology profession.

**Reminders**

- Student shall be responsible to write their official grades on the space provided.
- Student shall always make this document available for evaluation purposes, especially during enrolment.
- For Non-Catholics, RE 114 and RE 115 could be replaced with RE 40 and RE 30 respectively.
- NSTP 1, NSTP 2, PGS 1 and PGS 2 must be taken during the First Year.
- 3rd year standing – must have completed all first year to second year subjects
- 4th year standing – must have completed all first year to third year subjects

FIRST YEAR – FIRST SEMESTER						
Grade	Cat. #	Descriptive Title	# of Hrs/Wk		Units	Pre-Req
			Lec	Lab		
	RE 111	Salvation Hist. Old Testament	3	0	3	
	GE 2	Readings in Philippine History	3	0	3	
	GE 3	Mathematics in Modern World	3	0	3	
	GE 5	Purposive Communication	3	0	3	
	CCC 110	Introduction to Computing	3	0	3	
	CCC 111	Computer Programming 1	2	3	3	
	PE 1	Physical Fitness and Self-Testing Activities	2	0	2	
	PGS 1	Personal Growth Session 1	3	0	0	
	NSTP 1	National Service Training Program 1	3	0	3	
Total			25	3	23	

FIRST YEAR – SECOND SEMESTER						
Grade	Cat. #	Descriptive Title	# of Hrs/Wk		Units	Pre-Req
			Lec	Lab		
	RE 112	Christology	3	0	3	RE 111
	GE 1	Understanding the Self	3	0	3	
	GE 10	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	
	CCC 120	Computer Programming 2	2	3	3	CCC 111
	EMC-EPC 121	Freehand and Digital Drawing	2	3	3	
	EMC-EPC 122	Script Writing and Storyboard Design	3	0	3	CCC 110
	PE 2	Rhythmic Activities	2	0	2	PE 1
	NSTP 2	National Service Training Program 2	3	0	3	
	PGS 2	Personal Growth Session 2	3	0	0	PGS 1
Total			24	6	23	

SECOND YEAR – FIRST SEMESTER						
Grade	Cat. #	Descriptive Title	# of Hrs/Wk		Units	Pre-Req
			Lec	Lab		
	RE 113	Christian Faith	3	0	3	RE 112
	GE 7	Art Appreciation	3	0	3	
	GE 13	Sosyedad at Literatura/Panitikang Panlipunan	3	0	3	
	CCC 210	Data Structures and Algorithm	2	3	3	CCC 120
	CCC 220	Information Management	2	3	3	CCC 120
	EMC-EPC 211	Introduction to Game Design and Development	3	0	3	CCC 120
	EMC-EPC 212	Audio Design and Sound Engineering	3	0	3	
	PE 3	Recreational Activities (Individual and Dual Sports)	2	0	2	PE 2
Total			21	6	23	

SECOND YEAR – SECOND SEMESTER						
Grade	Cat. #	Descriptive Title	# of Hrs/Wk		Units	Pre-Req
			Lec	Lab		
	RE 114	The Church	3	0	3	RE 113
	GE 4	Contemporary World	3	0	3	
	GE 11	Filipino sa Iba't-Ibang Disiplina	3	0	3	
	EMC-EPC 221	Computer Graphics Programming	2	3	3	EMC-EPC 121
	EMC-EPC 222	Principles of 2D Animation	2	3	3	EMC-EPC 121
	EMC-EPC 223	Usability, HCI, and User Interaction Design	3	0	3	CCC 120
	CCC 324	Application Development and Emerging Technologies	3	0	3	CCC 120
	PE 4	Team Sports	2	0	2	PE 3
Total			21	6	23	

THIRD YEAR – FIRST SEMESTER						
Grade	Cat. #	Descriptive Title	# of Hrs/Wk		Units	Pre-Req
			Lec	Lab		
	RE 115	Liturgy and Sacraments	3	0	3	RE 114
	GE 8	Ethics	3	0	3	
	GE 9	The Life and Works of Rizal	3	0	3	
	EMC-EPC 310	Advanced 2D Animation	2	3	3	EMC-EPC 222
	EMC-EPC 311	Principles of 3D Animation	3	0	3	EMC-EPC 222
	EMC-EPC 312	Advanced Sound Production	2	3	3	EMC-EPC 212
	EMC-EPC 313	Image and Video Processing	3	0	3	CCC 210
Total			19	6	21	

THIRD YEAR – SECOND SEMESTER						
Grade	Cat. #	Descriptive Title	# of Hrs/Wk		Units	Pre-Req
			Lec	Lab		
	RE 116	Christian Morality	3	0	3	RE 115
	EMC-EPC 320	Advanced 3D Animation and Scripting	2	3	3	EMC-EPC 311
	EMC-EPC 321	Lightning and Effects	3	0	3	EMC-EPC 311
	EMC-EPC 322	Modelling and Rigging	3	0	3	EMC-EPC 311
	EMC-EPC 323	Compositing and Rendering	3	0	3	EMC-EPC 311
	EMC-EPC 324	Design and Production Process	3	0	3	EMC-EPC 211
	EMC-PE 325	EMC Professional Elective 1	2	3	3	3rd year standing
Total			19	6	21	

THIRD YEAR – SUMMER						
Grade	Cat. #	Descriptive Title	# of Hrs/Wk		Units	Pre-Req
			Lec	Lab		
	EMC-EPC 410	Capstone Project 1	2	3	3	4th year standing
Total			2	3	3	

FOURTH YEAR – FIRST SEMESTER						
Grade	Cat. #	Descriptive Title	# of Hrs/Wk		Units	Pre-Req
			Lec	Lab		
	GE 6	Science, Technology and Society	3	0	3	
	EMC-EPC 411	Capstone Project 2	2	3	3	EMC-EPC 410
	EMC-EPC 412	Animation Design and Production	3	0	3	4th year standing
	EMC-EPC 413	Texture Mapping	3	0	3	EMC-EPC 311
	EMC-PE 414	EMC Professional Elective 2	2	3	3	4th year standing
	EMC-PE 415	EMC Professional Elective 3	2	3	3	4th year standing
Total			15	9	18	

FOURTH YEAR – SECOND SEMESTER						
Grade	Cat. #	Descriptive Title	# of Hrs/Wk		Units	Pre-Req
			Lec	Lab		
	EMC-EPC 420	Internship (486 Hours)	9	0	9	4th year standing
Total			9	0	9	

BSEMC SUGGESTED PROFESSIONAL ELECTIVES						
	Descriptive Title	# of Hrs/Wk		Units	Pre-Req	
		Lec	Lab			
	Game Programming 1	3	0	3		
	Game Programming 2	3	0	3		
	Applied Mathematics for Games	3	0	3		
	Applied Game Physics	3	0	3		
	Game Programming 3	3	0	3		
	Artificial Intelligence in Games	3	0	3		
	Advanced Game Design	3	0	3		
	Game Networking	3	0	3		
	Game Production	3	0	3		