

Republic of the Philippines **BATANGAS STATE UNIVERSITY** Pablo Borbon Campus II, Alangilan, Batangas City, Philippines 4200 **COLLEGE OF INDUSTRIAL TECHNOLOGY** www.batstate-u.edu.ph Telefax: (043)425-0143 loc 2103



CURRICULUM Bachelor of Industrial Technology COMPUTER TECHNOLOGY Academic Year 2018-2019

Reference: CMO No. 20 S. 2013 and Based on PACUIT Proposal

Curriculum Description

The Bachelor of Industrial Technology Major in Computer Technology develops and prepares graduates who will be an integral part of the pool of technology experts in the specifically in the field of computer technology. The program is a strong combination of theoretical and practical concepts in electrical and electronics technology, computer technology, mathematics, computer science, management and general education that leads to the Bachelor of Industrial Technology degree. The Bachelor's Degree programs intends to prepare graduates to find employment as computer technologists here and abroad. Students will gain knowledge and skills in digital electronics, computer programming, computer networking and system analysis and design.

Program Objectives

1. Successfully practice as engineering technologists for the welfare of the society.

2. Demonstrate a high degree of professionalism at all times.

Program Outcomes

Graduates will have:

- a. An appropriate mastery of the knowledge, techniques, skills and modern tools of technology
- b. An ability to apply current knowledge and adapt to emerging applications of mathematics, science and technology
- c. An ability to conduct, analyze and interpret experiments and apply experimental results to improve processes
- d. An ability to apply creativity in the design of systems, components or processes appropriate to program objectives
- e. An ability to function effectively on teams
- f. An ability to identify, analyze and solve technical problems
- g. An ability to communicate effectively in writing and in oral presentation
- h. A recognition of the need for, and an ability to engage in lifelong learning
- i. An ability to understand professional, ethical and social responsibilities
- j. The knowledge of and respect for diverse backgrounds, contemporary societal and global issues concerning the profession
- k. A commitment to quality, timeliness and continuous improvement

Curriculum Components

| Code | Courses | Units | Total |
|---------|---|-------|----------|
| | A. General Education Courses (CMO No. 20, series of 2013) | | 36 units |
| | B. Professional and Management Courses | | 32 units |
| PM 101 | Occupational Health and Safety Management | 2 | |
| PM 102 | Industrial Operation & Management Practices | 3 | |
| PM 103 | Production and Operations Management | 3 | |
| PM 104 | Technology Research I | 3 | |
| PM 105 | Materials Technology Management | 3 | |
| PM 106 | Professional Ethics | 3 | |
| PM 107 | Technology Research II | 3 | |
| PM 109 | Manufacturing Technology | 3 | |
| PM 110 | Total Quality Management | 3 | |
| PM 111 | Environmental Technology | 3 | |
| PM 112 | Technopreneurship | 3 | |
| | C. Applied Sciences and Tools Courses | | 27 units |
| AST 111 | Math for Technology | 3 | |
| AST 102 | Applied Chemistry | 3 | |
| AST 105 | Applied Physics | 3 | |
| AST 133 | Production Drawing | 2 | |
| AST 129 | Electronics Measurements | 2 | |
| AST 113 | Electrical and Electronics Principles | 3 | |
| AST 135 | Computer Aided Design | 2 | |

| AST 114 | Digital Electronics | 3 | |
|----------|---|---|----------|
| AST 110 | Data Analytics | 3 | |
| AST 120 | Programmable Logic Control | 3 | |
| | D. Major Specialization Courses | | 36 units |
| CPT 111 | Computer Programming I | 3 | |
| CPT 112 | Computer Architecture | 3 | |
| CPT 121 | Computer Programming II | 3 | |
| CPT 211 | CISCO 1 | 3 | |
| CPT 212 | Computer Hardware Application | 3 | |
| CPT 221 | Operating Systems | 3 | |
| CPT 222 | CISCO 2 | 3 | |
| CPT 311 | Signal System Analysis | 3 | |
| CPT 312 | CISCO 3 | 3 | |
| CPT 313 | Multemidia (Visual Graphics & Web Design) | 3 | |
| CPT 321 | CISCO 4 | 3 | |
| CPT 322 | System Analysis and Design | 3 | |
| | E. Mandated Courses | | 14 units |
| PE 101 | Physical Fitness, Gymnastics and Aerobics | 2 | |
| PE 102 | Rhythmic Activities | 2 | |
| PE 103 | Individual and Dual Sports | 2 | |
| PE 104 | Team Sports | 2 | |
| NSTP 111 | National Service Training Program 1 | 3 | |
| NSTP 121 | National Service Training Program 2 | 3 | |
| | F. Supervised Industrial Training/OJT | | 20 units |

| SUMMARY | | | | |
|-------------------------------------|-----------------|--|--|--|
| Courses | Number of Units | | | |
| General Education | 36 | | | |
| Applied Sciences and Tool Courses | 27 | | | |
| Professional and Management Courses | 32 | | | |
| Specialization/Major Courses | 36 | | | |
| Supervised Industrial Training/OJT | 20 | | | |
| Mandated Courses (PE & NSTP) | 14 | | | |
| TOTAL | 165 | | | |

Republic of the Philippines BATANGAS STATE UNIVERSITY

Batangas City

COLLEGE OF INDUSTRIAL TECHNOLOGY

Bachelor of Industrial Technology (BIT) Computer Technology Effective A.Y. 2018 - 2019

PROGRAM OF STUDY

| | | IRST YEA | | | | |
|---|---|---|--|--|--|--|
| COURSE | | | EDIT | | NO. OF | |
| NO. | COURSE TITLE | | LB/SW | UNITS | HRS. | PRE-REQUISITE |
| AST 111 | Math for Technology | 3 | 0 | 3 | 3 | None |
| ST 102 | Applied Chemistry | 2 | 3 | 3 | 5 | None |
| ST 102 | Applied Physics | 2 | 3 | 3 | 5 | None |
| ST 133 | Production Drawing | 1 | 3 | 2 | 4 | None |
| ST 133 | Electronics Measurements | 1 | 3 | 2 | 4 | None |
| M 101 | Occupational Health and Safety Management | 2 | 0 | 2 | 2 | None |
| CPT 111 | Computer Programming I | 2 | 3 | 3 | 5 | None |
| CPT 112 | Computer Programming 1 Computer Architecture | 2 | 3 | 3 | 5 | None |
| ISTP 111 | * | | - | - | - | |
| | National Service Training Program 1 | 3 | 0 | 3 | 3 | None |
| PE 101 | Physical Fitness, Gymnastics and Aerobics | 2 | 0 | _ | _ | None |
| | TOTAL | | | 26 | 33 | |
| | F | IRST YEA | R | | | |
| | Sec | ond Semes | ster | | | |
| COURSE | COURSE TITLE CREDIT | | | | NO. OF | DDE DEOLUCIET |
| NO. | COURSE TITLE | LEC | LB/SW | UNITS | HRS. | PRE-REQUISITE |
| Ged 101 | Understanding the Self | 3 | 0 | 3 | 3 | None |
| Ged 102 | Mathematics in the Modern World | 3 | 0 | 3 | 3 | None |
| Ged 106 | Purposive Communication | 3 | 0 | 3 | 3 | None |
| Ged 100 | Science Technology and Society | 3 | 0 | 3 | 3 | None |
| AST 113 | Electrical and Electronics Principles | 2 | 3 | 3 | 5 | AST 129 |
| AST 135 | Computer Aided Design | 1 | 3 | 2 | 4 | AST 133 |
| CPT 121 | Computer Programming II | 2 | 3 | 3 | 5 | CPT 111 |
| NSTP 121 | | 3 | 0 | 3 | 3 | NSTP111 |
| PE 102 | National Service Training Program 2 | 2 | 0 | 2 | 2 | PE101 |
| PE 102 | Rhythmic Activities TOTAL | 2 | 0 | 25 | 2 26 | PEIUI |
| | IUIAL | | | 23 | 20 | |
| | SE | COND YE | AR | | | |
| | Fi | rst Semest | er | | | |
| COURSE | | CRI | EDIT | | NO. OF | |
| | | | | UNITS | | PRE-REQUISITE |
| NO. | COURSE TITLE | LEC | LB/SW | | HRS. | |
| NO. | | | | | | _ |
| NO. Ged 103 | The Life and Works of Rizal | 3 | 0 | 3 | 3 | None |
| NO. Ged 103 Ged 104 | The Life and Works of Rizal The Contemporary World | 3 3 | 0 0 | 3 | 3 3 | None |
| NO. Ged 103 Ged 104 TILI 101 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino | 3 3 3 | 0 0 0 | 3 3 3 | 3 3 3 | None None None |
| NO. Ged 103 Ged 104 FILI 101 PM 102 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices | 3 3 3 3 | 0 0 0 0 | 3 3 3 3 | 3 3 3 3 | None None None None |
| NO. Ged 103 Ged 104 TILI 101 PM 102 AST 114 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics | 3 3 3 3 2 | 0 0 0 0 3 | 3 3 3 3 3 3 | 3 3 3 3 5 | None None None AST 112 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 CPT 211 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 | 3 3 3 3 2 2 2 | 0 0 0 3 3 | 3 3 3 3 3 3 3 | 3 3 3 3 5 5 5 | None None None AST 112 CPT 121 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 CPT 211 CPT 212 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application | 3 3 3 2 2 2 2 | 0 0 0 3 3 3 | 3 3 3 3 3 3 3 3 | 3 3 3 5 5 5 5 5 | None None None AST 112 CPT 121 AST 112 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 CPT 211 CPT 212 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports | 3 3 3 3 2 2 2 | 0 0 0 3 3 | 3 3 3 3 3 3 3 2 | 3 3 3 5 5 5 5 2 | None None None AST 112 CPT 121 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 CPT 211 CPT 212 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application | 3 3 3 2 2 2 2 | 0 0 0 3 3 3 | 3 3 3 3 3 3 3 3 | 3 3 3 5 5 5 5 5 | None None None AST 112 CPT 121 AST 112 |
| | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL | 3 3 3 2 2 2 2 2 | 0 0 0 3 3 3 0 | 3 3 3 3 3 3 3 2 | 3 3 3 5 5 5 5 2 | None None None AST 112 CPT 121 AST 112 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 CPT 211 CPT 212 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL | 3 3 3 2 2 2 2 | 0 0 0 3 3 3 0 | 3 3 3 3 3 3 3 2 | 3 3 3 5 5 5 5 2 | None None None AST 112 CPT 121 AST 112 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 CPT 211 CPT 212 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL SE Sec | 3 3 3 2 2 2 2 2 2 2 0 0 0 0 0 1 2 0 0 0 0 1 2 0 0 0 0 | 0 0 0 3 3 3 0 | 3 3 3 3 3 3 3 2 23 | 3 3 3 5 5 5 5 2 | None None None AST 112 CPT 121 AST 112 PE102 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 CPT 211 CPT 212 PE 103 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL SE Sec | 3 3 3 2 2 2 2 2 2 2 0 0 0 0 0 1 2 0 0 0 0 1 2 0 0 0 0 | 0 0 0 3 3 3 0 AR ster | 3 3 3 3 3 3 3 2 | 3 3 3 5 5 5 5 2 29 | None None None AST 112 CPT 121 AST 112 |
| NO. Ged 103 Ged 104 TILI 101 PM 102 AST 114 CPT 211 CPT 212 PE 103 COURSE NO. | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL SE COURSE TITLE | 3 3 3 2 2 2 2 2 2 2 2 2 2 0 0 0 0 5 0 0 5 0 5 | 0 0 0 3 3 3 0 4 R Ster EDIT | 3 3 3 3 3 3 3 2 23 | 3 3 3 5 5 5 2 29 29 NO. OF HRS. | None None None AST 112 CPT 121 AST 112 PE102 |
| NO. Ged 103 Ged 104 ILI 101 M 102 AST 114 PT 211 PT 212 E 103 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL SE Sec | 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 0 0 0 3 3 3 0 4R ster EDIT LB/SW | 3 3 3 3 3 3 2 23 UNITS | 3 3 3 5 5 5 2 29 NO. OF | None None None AST 112 CPT 121 AST 112 PE102 PRE-REQUISITE |
| NO. Ged 103 Ged 104 TLI 101 PM 102 AST 114 CPT 211 CPT 212 PE 103 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL SE COURSE TITLE Filipino sa iba't ibang Disiplina Ethics | 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 0 0 0 3 3 3 0 0 AR Ster EDIT LB/SW 0 | 3 3 3 3 3 3 3 2 23 UNITS 3 | 3 3 3 5 5 5 2 29 NO. OF HRS. 3 | None None None AST 112 CPT 121 AST 112 PE102 PRE-REQUISITE None |
| NO. Ged 103 Ged 104 TLI 101 PM 102 AST 114 CPT 211 PE 103 COURSE NO. TLI 102 Ged 107 PM 103 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL SE Sec COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management | 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 0 0 0 3 3 3 0 0 AR Ster EDIT LB/SW 0 0 0 | 3 3 3 3 3 3 3 2 23 UNITS 3 3 3 3 3 3 | 3 3 3 5 5 5 2 29 29 NO. OF HRS. 3 3 3 3 | None None None AST 112 CPT 121 AST 112 PE102 PE102 PRE-REQUISITE None None None None |
| NO. Ged 103 Ged 104 TLI 101 'M 102 AST 114 'PT 211 'PT 212 'E 103 'COURSE NO. TLI 102 Ged 107 'M 103 AST 110 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL SE COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management Data Analytics | 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 0 0 0 3 3 3 0 0 AR Ster EDIT LB/SW 0 0 0 0 0 | 3 3 3 3 3 3 3 2 23 UNITS 3 3 3 3 3 3 | 3 3 3 5 5 5 2 29 29 NO. OF HRS. 3 3 3 3 3 3 | None None None AST 112 CPT 121 AST 112 PE102 PE102 PRE-REQUISITI None None GEd 102, AST 11 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 PPT 211 CPT 212 PE 103 COURSE NO. FILI 102 Ged 107 PM 103 AST 110 AST 120 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL SE COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management Data Analytics Programmable Logic Control | 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 0 0 0 3 3 3 0 0 AR Ster EDIT LB/SW 0 0 0 0 0 0 0 3 | 3 3 3 3 3 3 3 2 23 UNITS 3 3 3 3 3 3 3 | 3 3 3 5 5 5 2 29 29 NO. OF HRS. 3 3 3 3 5 | None None None AST 112 CPT 121 AST 112 PE102 PE102 PRE-REQUISITE None None GEd 102, AST 111 AST 114 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 PPT 211 PT 212 PE 103 OURSE NO. FILI 102 Ged 107 PM 103 AST 110 AST 120 CPT 221 | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL TOTAL SE COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management Data Analytics Programmable Logic Control Operating Systems | 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 0 0 0 0 5 0 0 5 0 0 5 0 0 5 0 0 5 0 0 5 0 0 5 0 0 5 0 0 2 2 2 2 | 0 0 0 3 3 3 0 0 0 AR Ster EDIT LB/SW 0 0 0 0 0 0 0 3 3 3 | 3 3 3 3 3 3 3 2 23 UNITS 3 3 3 3 3 3 3 3 3 3 3 3 3 | 3 3 3 5 5 5 2 29 29 NO. OF HRS. 3 3 3 3 3 5 5 5 | None None None None AST 112 CPT 121 AST 112 PE102 PRE-REQUISITI None None None State AST 112 CPT 121 AST 112 PE102 |
| NO. Ged 103 Ged 104 FILI 101 PM 102 AST 114 CPT 211 CPT 212 PE 103 COURSE | The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Digital Electronics CISCO 1 Computer Hardware Application Individual and Dual Sports TOTAL SE COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management Data Analytics Programmable Logic Control | 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 0 0 0 3 3 3 0 0 AR Ster EDIT LB/SW 0 0 0 0 0 0 0 3 | 3 3 3 3 3 3 3 2 23 UNITS 3 3 3 3 3 3 3 | 3 3 3 5 5 5 2 29 29 NO. OF HRS. 3 3 3 3 5 | None None None AST 112 CPT 121 AST 112 PE102 PE102 PRE-REQUISITI None None GEd 102, AST 11 |

| | T | HIRD YEA | R | | | |
|----------|---|------------|-------|-------|----------------|-------------------|
| | Fi | rst Semest | er | | | |
| COURSE | COURSE TITLE | CREDIT | | UNITO | NO. OF | |
| NO. | | LEC | LB/SW | UNITS | HRS. | PRE-REQUISITE |
| LITR 102 | Asean Literature | 3 | 0 | 3 | 3 | None |
| Ged 105 | Readings in Philippines History | 3 | 0 | 3 | 3 | None |
| PM 104 | Technology Research I | 3 | 0 | 3 | 3 | CPT 221, CPT 222 |
| PM 105 | Materials Technology Management | 3 | 0 | 3 | 3 | CPT 221, CPT 222 |
| PM 106 | Professional Ethics | 3 | 0 | 3 | 3 | None |
| CPT 311 | Signal System Analysis | 2 | 3 | 3 | 5 | CPT 221 |
| CPT 312 | CISCO 3 | 2 | 3 | 3 | 5 | CPT 222 |
| CPT 313 | Multemidia (Visual Graphics & Web Design) | 2 | 3 | 3 | 5 | CPT 212 |
| | TOTAL | | | 24 | 30 | |
| | | | | | <u> </u> | |
| | T | HIRD YEA | R | | | |
| | Sec | ond Semes | ster | | | |
| COURSE | | | EDIT | | NO. OF HRS. | PRE-REQUISITE |
| NO. | COURSE TITLE | LEC | LB/SW | UNITS | | |
| Ged 108 | Art Appreciation | 3 | 0 | 3 | 3 | None |
| PM 107 | Technology Research II | 3 | 0 | 3 | 3 | *Regular Standing |
| PM 108 | Manufacturing Technology | 3 | 0 | 3 | 3 | *Regular Standing |
| PM 109 | Total Quality Management | 3 | 0 | 3 | 3 | *Regular Standing |
| PM 110 | Environmental Technology | 3 | 0 | 3 | 3 | *Regular Standing |
| PM 111 | Technopreneurship | 3 | 0 | 3 | 3 | *Regular Standing |
| CPT 321 | CISCO 4 | 2 | 3 | 3 | 5 | CPT 312 |
| CPT 322 | Signal System Analysis | 2 | 3 | 3 | 5 | CPT 311 |
| | TOTAL | | | 24 | 28 | |
| | | | | | | |
| | FO | URTH YEA | AR | | | |
| | | rst Semest | | | | |
| COURSE | | CREDIT | | | NO. OF | |
| NO. | COURSE TITLE | LEC | LB/SW | UNITS | HRS. | PRE-REQUISITE |
| OJT 1 | Supervised Industrial Training 1 (540hrs) | 0 | 10 | 10 | 540 | CPT 321, CPT 322 |
| | TOTAL | | | 10 | 540 | , |
| | | | | | | |
| | FO | URTH YE | AR | | | |
| | | ond Semes | | | | |
| COURSE | | CREDIT | | | NO. OF | |
| NO. | COURSE TITLE | LEC | LB/SW | UNITS | HRS. | PRE-REQUISITE |
| OJT 2 | Supervised Industrial Training 2 (540hrs) | 0 | 10 | 10 | 540 | OJT 1 |
| 0012 | | 5 | | | 210 | UVI 1 |

* Regular Standing: No deficiencies on the previous semester.

TOTAL UNITS: 165