## Undergraduate Program for 2014

## 1 Training target

The major of computer science and technology aims at training professionals who possess the proper knowledge and integrated skills with computer science and technology basic theory, basic skills and methods, and have strong ability of computer software system analysis, design, development and software project management skills, and are able to do in the field of computer science and technology and related computer teaching and scientific research, system design, and project management skills.

## 2 Length of schooling

Four years

## 3 Award degree

Bachelor of engineering

## 4 Credits requirement

160 credits (not include Extra credit) . 48 credits for general compulsory courses, 9 credits for general elective courses, 46 credits for discipline basic course, 30 credits for professional required courses, 11 credits for professional limited selection courses, 16 credits for comprehensive application courses. Any more, students also need to get 10 quality development for extra-curricular credits, and to read the "health education of College students".

## 5 Requirement for the students from Hong Kong, Macao and Taiwan

In Accordance to the Education Office of Guangdong province, the students from Hong Kong, Macao and Taiwan do not need to take part in "defense education" and "ideological and political theory", but they should take part in the rest of courses strictly, and accordance with requirements of the professional teaching plan, hours and credits

## 6 Requirement for the international students

In Accordance with the education office of Guangdong province, the international students do not need to take part in "national defense education" except the majors of philosophy, politics and economics, but they should pass the rest of courses strictly, and accordance with requirements of the professional teaching plan, hours and credits.
7 Teaching schedule
Table 1. table of credits requirement

| course category | course nature | lowest credits | lowest credits of each term |  |  |  |  |  |  |  | total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
| general | obligatory | 48 | 10.5 | 9 | 12 | 5 | 7 | 4.5 | 0 | 0 | 48 |
|  | limited | 9 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 0 | 9 |
| discipline | obligatory | 46 | 13 | 9 | 16 | 8 | 0 | 0 | 0 | 0 | 46 |
| professional | obligatory | 30 | 2 | 4 | 0 | 8 | 13 | 3 | 0 | 0 | 30 |
|  | limited | 11 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 11 |
| comprehensive application | obligatory | 16 | 0 | 3 | 0 | 2 | 2 | 2 | 2 | 5 | 16 |


| total | 160 | 25.5 | 26 | 29 | 24 | 24 | 17 | 10 | 5 |  | 60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Table 2. table of course schedule

| course category | course nature | course type | course code | course name | Credits <br> (c) | Weeks <br> (w) | Hours <br> (h) | hours allocation |  |  | Term / weeks / hours |  |  |  |  |  |  |  | Exam |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
|  |  |  |  |  |  |  |  | teach | Exp. | practice | 15 | 16 | 16 | 16 | 16 | 16 | 16 | 15 |  |
| General course | Obligatory | national defense education | 140471 | Military theory(training) | 1.0 | 15 | 15 | 15 | 0 | 0 | 1 |  |  |  |  |  |  |  | N |
|  |  | Ideological and political theory course | 140193 | Marx's basic principle | 3.0 | 15 | 45 | 30 | 0 | 15 | 3 |  |  |  |  |  |  |  | $\star$ |
|  |  |  | 140464 | Ideological and moral cultivation and legal basis | 4.0 | 16 | 64 | 64 | 0 | 0 |  |  | 4 |  |  |  |  |  | $\star$ |
|  |  |  | 140222 | Outline of modern history of China | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  | 2 |  |  |  |  |  | $\star$ |
|  |  |  | 140473 | Introduction to the theoretical system of Mao Zedong and socialism with Chinese characteristics(1) | 3.0 | 16 | 48 | 32 | 0 | 16 |  |  |  | 3 |  |  |  |  | $\star$ |
|  |  |  | 140483 | Introduction to the theoretical system of Mao Zedong and socialism with Chinese characteristics(2) | 3.0 | 16 | 48 | 32 | 0 | 16 |  |  |  |  | 3 |  |  |  | $\star$ |
|  |  |  | 140242 | Situation and policy | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  |  |  |  | 2 |  |  | ふ |
|  |  | $\begin{aligned} & \hline \text { Language } \\ & \text { and } \\ & \text { skills(1) } \\ & \hline \end{aligned}$ | 121542 | University Chinese | 2.0 | 16 | 32 | 32 | 0 | 0 |  | 2 |  |  |  |  |  |  | $\star$ |
|  |  |  | 121552 | Application Writing | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  | 2 |  |  |  |  |  | $\star$ |
|  |  | $\begin{gathered} \\ \\ \text { Language } \\ \text { and } \\ \text { skills(2) } \end{gathered}$ | 090834 | College English IIIa | 4.0 | 15 | 60 | 60 | 0 | 0 | 4 |  |  |  |  |  |  |  | $\star$ |
|  |  |  | 090864 | College English IIb | 4.0 | 15 | 60 | 60 | 0 | 0 | 4 |  |  |  |  |  |  |  | $\star$ |
|  |  |  | 090874 | College English IIIb | 4.0 | 16 | 64 | 64 | 0 | 0 |  | 4 |  |  |  |  |  |  | $\star$ |
|  |  |  | 090844 | College English IVa | 4.0 | 16 | 64 | 64 | 0 | 0 |  | 4 |  |  |  |  |  |  | $\star$ |
|  |  |  | 180264 | English Chinese / English translation | 4.0 | 16 | 64 | 64 | 0 | 0 |  |  | 4 |  |  |  |  |  | $\star$ |
|  |  |  | 090884 | College English IVb | 4.0 | 16 | 64 | 64 | 0 | 0 |  |  | 4 |  |  |  |  |  | $\star$ |
|  |  |  | 180412 | Academic English | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  |  | 2 |  |  |  |  | $\star$ |


|  |  | Physical and mental education | 400015 | Career development and planning | 0.5 | 8 | 8 | 8 | 0 | 0 | 1 |  |  |  |  |  |  | is |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 130452 | Sports option I | 2.0 | 15 | 30 | 30 | 0 | 0 | 2 |  |  |  |  |  |  | $\star$ |
|  |  |  | 140611 | Mental health education | 1.0 | 15 | 15 | 15 | 0 | 0 |  | 1 |  |  |  |  |  | T |
|  |  |  | 130462 | Sports option II | 2.0 | 16 | 32 | 32 | 0 | 0 |  | 2 |  |  |  |  |  | t |
|  |  |  | 130472 | Sports option III | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  |  |  | 2 |  |  | ts |
|  |  |  | 130482 | Sports option IV | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  |  |  |  | 2 |  | t |
|  |  |  | 400002 | Pioneering work | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  |  |  | 2 |  |  | is |
|  |  |  | 40025 | Employment guidance | 0.5 | 8 | 8 | 8 | 0 | 0 |  |  |  |  |  | 1 |  | 预 |
|  |  |  |  | subtotal | 48 |  | 758 | 695 |  | 63 | 11 | 9 | 12 | 5 | 7 | 5 |  |  |
|  |  |  | 990032 | General elective course (1) | 1.0 | 16 | 16 | 16 | 0 | 0 |  | 1 |  |  |  |  |  | * |
|  |  |  | 990062 | General election (2) | 1.0 | 16 | 16 | 16 | 0 |  |  |  | 1 |  |  |  |  | is |
|  | limited | Gener | 990072 | General election (3) | 1.0 | 16 | 16 | 16 | 0 | 0 |  |  |  | 1 |  |  |  | is |
|  |  |  | 000001 | Humanities science | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  |  |  | 2 |  |  | is |
|  |  |  | 990042 | Social science courses | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  |  |  |  | 2 |  | is |
|  |  |  | 990052 | Art Program course | 2.0 | 16 | 32 | 32 | 0 | 0 |  |  |  |  |  |  | 2 | is |
|  |  |  |  | subtotal | 9 |  | 144 |  |  |  |  | 1 | 1 | 1 | 2 | 2 | 2 |  |

Table 2. table of course schedule (continue)

| course category | course nature | course type | course code | course name | Credits <br> (c) | Weeks <br> (w) | Hours <br> (h) | hours allocation |  |  | Term / weeks / hours |  |  |  |  |  |  |  | exam |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
|  |  |  |  |  |  |  |  | teach | Exp. | practice | 15 | 16 | 16 | 16 | 16 | 16 | 16 | 15 |  |
| discipline | Obligatory | Discipline basic course | 100066 | Advanced mathematics I | 6.0 | 15 | 90 | 90 | 0 | 0 | 6 |  |  |  |  |  |  |  | $\star$ |
|  |  |  | 110084 | Program design | 4.0 | 15 | 60 | 40 | 20 | 0 | 4 |  |  |  |  |  |  |  | $\star$ |
|  |  |  | 111303 | Introduction to computer science | 3.0 | 15 | 45 | 45 | 0 | 0 | 3 |  |  |  |  |  |  |  | $\star$ |
|  |  |  | 100074 | Advanced mathematics II | 4.0 | 16 | 64 | 64 | 0 | 0 |  | 4 |  |  |  |  |  |  | $\star$ |
|  |  |  | 110555 | Digital and analog circuit technology | 5.0 | 16 | 80 | 58 | 22 | 0 |  | 5 |  |  |  |  |  |  | $\star$ |
|  |  |  | 101044 | Linear algebra | 4.0 | 16 | 64 | 64 | 0 | 0 |  |  | 4 |  |  |  |  |  | $\star$ |
|  |  |  | 110094 | Discrete mathematics | 4.0 | 16 | 64 | 64 | 0 | 0 |  |  | 4 |  |  |  |  |  | $\star$ |
|  |  |  | 110104 | Data structure | 4.0 | 16 | 64 | 54 | 10 | 0 |  |  | 4 |  |  |  |  |  | $\star$ |
|  |  |  | 119704 | Computer composition principles and assembly language | 4.0 | 16 | 64 | 44 | 20 | 0 |  |  | 4 |  |  |  |  |  | $\star$ |
|  |  |  | 109235 | Linear algebra A | 5.0 | 16 | 80 | 80 | 0 | 0 |  |  | 5 |  |  |  |  |  | $\star$ |




|  |  |  |  |  |  |  |  | teach | exp. | practice | 15 | 16 | 16 | 16 | 16 | 16 | 16 | 15 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Comprehen sive application | Obligatory | comprehens ive application | 119871 | Social survey | 1.0 | 3 | 0 | 0 | 0 | 0 |  | 0 |  |  |  |  |  |  | $\hat{3}$ |
|  |  |  | 112452 | Programming course design | 2.0 | 8 | 32 | 0 | 32 | 0 |  | 4 |  |  |  |  |  |  | $\star$ |
|  |  |  | 113652 | Data structure course design | 2.0 | 8 | 32 | 10 | 22 | 0 |  |  |  | 4 |  |  |  |  | * |
|  |  |  | 119532 | Database system design | 2.0 | 8 | 32 | 10 | 22 | 0 |  |  |  |  | 4 |  |  |  | is |
|  |  |  | 112462 | Software engineering course design | 2.0 | 8 | 32 | 0 | 32 | 0 |  |  |  |  |  | 4 |  |  | * |
|  |  |  | 112432 | Comprehensive practice | 2.0 | 8 | 32 | 10 | 22 | 0 |  |  |  |  |  |  | 4 |  | * |
|  |  |  | 116032 | Graduation practice | 2.0 | 10 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  | 0 | * |
|  |  |  | 116083 | Graduation design | 3.0 | 5 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  | 0 | N |
|  |  |  |  | subtotal | 16 |  | 160 | 30 | 130 |  |  | 4 |  | 4 | 4 | 4 | 4 |  |  |

## Note: <br> *: Examination <br> s: Investigation

