

C N YANG SCHOLARS' PROGRAMME (EEE)
(ADMITTED TO ENGINEERING 1 FROM AY2011-2012 WITH INDUSTRIAL ORIENTATION)

AU REQUIREMENT TABLE

| COURSE TYPE | | AU REQUIRED |
|----------------------------|------------------------------------|-------------|
| CORE COURSES | | 87 |
| MAJOR PRESCRIBED ELECTIVES | | 25 |
| GER CORE | | 12 |
| GER-PE REQUIREMENT | GER-PE - AHSS | 3 |
| | GER-PE - BM | 3 |
| | GER-PE - STS | 3 |
| | GER-PE - LS | 3 |
| | Any Category (AHSS, BM, STS or LS) | 3 |
| UNRESTRICTED ELECTIVES | | 4 |
| TOTAL | | 143 |

CURRICULUM STRUCTURE

| COURSE CODE AND TITLE | TYPE | NO OF HOURS PER WEEK | | | | AU | PRE-REQUISITE/ REPLACEMENT | |
|--|--|----------------------|-----|-----|-------|------|-------------------------------|----------------|
| | | LEC | TUT | LAB | TOTAL | | | |
| YEAR 1 SEMESTER 1 | | | | | | | | |
| CY1001 | INTRODUCTORY BIOLOGY | C | 2 | 2 | 0 | 4 | 4 | |
| CY1101 | PRINCIPLES OF MODERN CHEMISTRY | C | 3 | 1 | 0 | 4 | 4 | |
| CY1201 | CALCULUS OF ONE VARIABLE | C | 3 | 1 | 0.5 | 4.5 | 4 | REPLACE FE1006 |
| CY1301 | MECHANICS | C | 3 | 1 | 0 | 4 | 4 | REPLACE FE1011 |
| | LABORATORY * | PE | 0 | 0 | 6 | 6 | 3 | REPLACE FE1073 |
| HW0110 | EFFECTIVE COMMUNICATION | GC | 1 | 1 | 0 | 2 | 2 | |
| TOTAL | | | 12 | 6 | 6.5 | 24.5 | 21 | |
| * TO CHOOSE ONE FROM THE FOLLOWING TWO LAB | | | | | | | | |
| CY1102 | FUNDAMENTALS TECHNIQUES OF EXPERIMENTAL CHEMISTRY AND BIOLOGICAL CHEMISTRY | PE | 0 | 0 | 6 | 6 | 3 | |
| CY1304 | PHYSICS LABORATORY I | PE | 0 | 0 | 6 | 6 | 3 | |
| YEAR 1 SEMESTER 2 | | | | | | | | |
| CY1202 | CALCULUS OF SEVERAL VARIABLES | C | 3 | 1 | 0.5 | 4.5 | 4 | REPLACE EE1007 |
| CY1302 | ELECTROMAGNETISM AND RELATIVITY | C | 3 | 1 | 0 | 4 | 4 | REPLACE EE1002 |
| EE1003 | INTRODUCTION TO MATERIALS FOR ELECTRONICS | C | 2 | 1 | 0 | 3 | 3 | |
| FE1008 | COMPUTING | C | 2 | 1 | 1 | 4 | 3 | |
| CY1400 | CN YANG SCHOLAR PROGRAMME UNDERGRADUATE RESEARCH EXPERIENCE | PE | 0 | 0 | 9 | 9 | 3 | |
| | HUMANITIES & SOCIAL SCIENCES [AHSS] | GE | 2 | 1 | 0 | 3 | 3 | |
| TOTAL | | | 12 | 5 | 10.5 | 27.5 | 20 | |
| YEAR 2 SEMESTER 1 | | | | | | | | |
| EE2001 | CIRCUIT ANALYSIS | C | 3 | 1 | 0 | 4 | 4 | |
| EE2004 | DIGITAL ELECTRONICS | C | 3 | 1 | 0 | 4 | 4 | |
| EE2006 | ENGINEERING MATHEMATICS I | C | 3 | 1 | 0 | 4 | 4 | FE1007 |
| EE2071 | LABORATORY 2A | C | 0 | 0 | 3 | 3 | 1 | |
| CY1203 | LINEAR ALGEBRA & DIFFERENTIAL EQUATIONS | C | 2 | 2 | 0.5 | 4.5 | 4 | REPLACE EE2007 |
| CY1303 | WAVES AND QUANTUM MECHANICS | UE | 3 | 1 | 0 | 4 | 4 | |
| TOTAL | | | 14 | 6 | 3.5 | 23.5 | 21 | |

| COURSE CODE AND TITLE | TYPE | NO OF HOURS PER WEEK | | | | AU | PRE-REQUISITE/ REPLACEMENT | |
|----------------------------------|---|----------------------|------|-----|-------|----|-------------------------------|-----------------|
| | | LEC | TUT | LAB | TOTAL | | | |
| YEAR 2 SEMESTER 2 | | | | | | | | |
| EE2002 | ANALOG ELECTRONICS | C | 3 | 1 | 0 | 4 | 4 | |
| EE2003 | SEMICONDUCTOR FUNDAMENTALS | C | 3 | 1 | 0 | 4 | 4 | EE1002 |
| EE2008 | DATA STRUCTURES & ALGORITHMS | C | 2 | 1 | 0 | 3 | 3 | |
| EE2010 | SIGNALS AND SYSTEMS | C | 3 | 1 | 0 | 4 | 4 | FE1006 & FE1007 |
| EE2072 | LABORATORY 2B | C | 0 | 0 | 3 | 3 | 1 | |
| EE2073 | INTRODUCTION TO EEE DESIGN & PROJECT | C | 0.5 | 0.5 | 3 | 4 | 2 | |
| TOTAL | | | 11.5 | 4.5 | 6 | 22 | 18 | |
| YEAR 3 SEMESTER 1 | | | | | | | | |
| EE3001 | ENGINEERING ELECTROMAGNETICS | C | 3 | 1 | 0 | 4 | 4 | # EE2007 |
| EE3002 | MICROPROCESSORS | C | 3 | 1 | 0 | 4 | 4 | # |
| EE3080 | DESIGN & INNOVATION PROJECT | C | 0.5 | 0 | 6 | 6 | 2 | YEAR 3 STANDING |
| EE3XXX | TECHNICAL ELECTIVE 1 | PE | 2 | 1 | 0 | 3 | 3 | # |
| HW0210 | TECHNICAL COMMUNICATION | GC | 1 | 1 | 0 | 2 | 2 | |
| TOTAL | | | 9.5 | 4 | 6 | 19 | 15 | |
| YEAR 3 SEMESTER 2 | | | | | | | | |
| EE3XXX | TECHNICAL ELECTIVE 2 | PE | 2 | 1 | 0 | 3 | 3 | # |
| EE0001 | IMPACT OF ELECTROMAGNETIC RADIATION ON HUMANS | GC | 2 | 1 | 0 | 3 | 3 | |
| GER ELECTIVE | | GE | 2 | 1 | 0 | 3 | 3 | |
| LIBERAL STUDIES | | GE | 2 | 1 | 0 | 3 | 3 | |
| SCIENCE, TECHNOLOGY & SOCIETY | | GE | 2 | 1 | 0 | 3 | 3 | |
| TOTAL | | | 10 | 5 | 0 | 15 | 15 | |
| YEAR 3 SPECIAL SEMESTER | | | | | | | | |
| EE3076 | INDUSTRIAL ORIENTATION | C | - | - | - | - | 4 | YEAR 3 STANDING |
| YEAR 4 SEMESTER 1 | | | | | | | | |
| EE4080 | FINAL YEAR PROJECT | C | 0 | 0 | 12 | 12 | 4 | YEAR 4 STANDING |
| EE4XXX | DESIGN ELECTIVE 1 | PE | 1 | 0 | 3 | 4 | 2 | |
| EE4XXX | TECHNICAL ELECTIVE 1 | PE | 2 | 1 | 0 | 3 | 3 | |
| EE4XXX | TECHNICAL ELECTIVE 2 | PE | 2 | 1 | 0 | 3 | 3 | |
| BUSINESS & MANAGEMENT (HRM) | | GE | 2 | 1 | 0 | 3 | 3 | |
| TOTAL | | | 7 | 3 | 15 | 25 | 15 | |
| YEAR 4 SEMESTER 2 | | | | | | | | |
| EE4080 | FINAL YEAR PROJECT | C | 0 | 0 | 12 | 12 | 4 | YEAR 3 STANDING |
| EE4XXX | DESIGN ELECTIVE 2 | PE | 1 | 0 | 3 | 4 | 2 | |
| EE4XXX | TECHNICAL ELECTIVE 3 | PE | 2 | 1 | 0 | 3 | 3 | |
| EE0040 | ENGINEERS & SOCIETY | GC | 2 | 1 | 0 | 3 | 3 | |
| HW0310 | PROFESSIONAL COMMUNICATION | GC | 1 | 1 | 0 | 2 | 2 | |
| TOTAL | | | 6 | 3 | 15 | 24 | 14 | |
| GRAND TOTAL (YEAR 1 TO 4) | | | | | | | 143 | |

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CURRICULUM STRUCTURE

| COURSE CODE AND TITLE | TYPE | NO OF HOURS PER WEEK | | | | AU | PRE-REQUISITE/ REPLACEMENT | |
|---|--|----------------------|------|-----|-------|------|-------------------------------|-----------------|
| | | LEC | TUT | LAB | TOTAL | | | |
| YEAR 1 SEMESTER 1 | | | | | | | | |
| CY1001 | INTRODUCTORY BIOLOGY | C | 2 | 2 | 0 | 4 | 4 | |
| CY1101 | PRINCIPLES OF MODERN CHEMISTRY | C | 3 | 1 | 0 | 4 | 4 | |
| CY1201 | CALCULUS OF ONE VARIABLE | C | 3 | 1 | 0.5 | 4.5 | 4 | REPLACE FE1006 |
| CY1301 | MECHANICS | C | 3 | 1 | 0 | 4 | 4 | REPLACE FE1011 |
| | LABORATORY * | PE | 0 | 0 | 6 | 6 | 3 | REPLACE FE1073 |
| HW0110 | EFFECTIVE COMMUNICATION | GC | 1 | 1 | 0 | 2 | 2 | |
| | TOTAL | | 12 | 6 | 6.5 | 24.5 | 21 | |
| * TO CHOOSE ONE FROM THE FOLLOWING TWO LAB | | | | | | | | |
| CY1102 | FUNDAMENTALS TECHNIQUES OF EXPERIMENTAL CHEMISTRY AND BIOLOGICAL CHEMISTRY | PE | 0 | 0 | 6 | 6 | 3 | |
| CY1304 | PHYSICS LABORATORY I | PE | 0 | 0 | 6 | 6 | 3 | |
| YEAR 1 SEMESTER 2 | | | | | | | | |
| EE1003 | INTRODUCTION TO MATERIALS FOR ELECTRONICS | C | 2 | 1 | 0 | 3 | 3 | |
| FE1008 | COMPUTING | C | 2 | 1 | 1 | 4 | 3 | |
| CY1202 | CALCULUS OF SEVERAL VARIABLES | C | 3 | 1 | 0.5 | 4.5 | 4 | REPLACE EE1007 |
| CY1302 | ELECTROMAGNETISM AND RELATIVITY | C | 3 | 1 | 0 | 4 | 4 | REPLACE EE1002 |
| CY1400 | CN YANG SCHOLAR PROGRAMME UNDERGRADUATE RESEARCH EXPERIENCE | PE | 0 | 0 | 9 | 9 | 3 | |
| | HUMANITIES & SOCIAL SCIENCES | GE | 2 | 1 | 0 | 3 | 3 | |
| | TOTAL | | 12 | 5 | 10.5 | 27.5 | 20 | |
| YEAR 2 SEMESTER 1 | | | | | | | | |
| EE2001 | CIRCUIT ANALYSIS | C | 3 | 1 | 0 | 4 | 4 | |
| EE2004 | DIGITAL ELECTRONICS | C | 3 | 1 | 0 | 4 | 4 | |
| EE2006 | ENGINEERING MATHEMATICS I | C | 3 | 1 | 0 | 4 | 4 | FE1007 |
| EE2071 | LABORATORY 2A | C | 0 | 0 | 3 | 3 | 1 | |
| CY1203 | LINEAR ALGEBRA & DIFFERENTIAL EQUATIONS | C | 2 | 2 | 0.5 | 4.5 | 4 | REPLACE EE2007 |
| CY1303 | WAVES AND QUANTUM MECHANICS | UE | 3 | 1 | 0 | 4 | 4 | |
| | TOTAL | | 14 | 6 | 3.5 | 23.5 | 21 | |
| YEAR 2 SEMESTER 2 | | | | | | | | |
| EE2002 | ANALOG ELECTRONICS | C | 3 | 1 | 0 | 4 | 4 | |
| EE2003 | SEMICONDUCTOR FUNDAMENTALS | C | 3 | 1 | 0 | 4 | 4 | EE1002 |
| EE2008 | DATA STRUCTURES & ALGORITHMS | C | 2 | 1 | 0 | 3 | 3 | |
| EE2010 | SIGNALS AND SYSTEMS | C | 3 | 1 | 0 | 4 | 4 | FE1006 & FE1007 |
| EE2072 | LABORATORY 2B | C | 0 | 0 | 3 | 3 | 1 | |
| EE2073 | INTRODUCTION TO EEE DESIGN & PROJECT | C | 0.5 | 0.5 | 3 | 4 | 2 | |
| HW0210 | TECHNICAL COMMUNICATION | GC | 1 | 1 | 0 | 2 | 2 | |
| | TOTAL | | 12.5 | 5.5 | 6 | 24 | 20 | |

| COURSE CODE AND TITLE | TYPE | NO OF HOURS PER WEEK | | | | AU | PRE-REQUISITE/ REPLACEMENT |
|--|------|----------------------|-----|-----|-------|----|-------------------------------|
| | | LEC | TUT | LAB | TOTAL | | |
| YEAR 3 SEMESTER 1 | | | | | | | |
| EE3001 ENGINEERING ELECTROMAGNETICS | C | 3 | 1 | 0 | 4 | 4 | EE2007 ; # |
| EE3002 MICROPROCESSORS | C | 3 | 1 | 0 | 4 | 4 | # |
| EE3080 DESIGN & INNOVATION PROJECT | C | 0.5 | 0 | 6 | 6 | 2 | YEAR 3 STANDING |
| EE3XXX TECHNICAL ELECTIVE 1 | PE | 2 | 1 | 0 | 3 | 3 | # |
| EE3XXX TECHNICAL ELECTIVE 2 | PE | 2 | 1 | 0 | 3 | 3 | # |
| EE0001 IMPACT OF ELECTROMAGNETIC RADIATION ON HUMANS | GC | 2 | 1 | 0 | 3 | 3 | |
| TOTAL | | 12.5 | 5 | 6 | 23 | 19 | |
| YEAR 3 SEMESTER 2 | | | | | | | |
| EE3179 INDUSTRIAL ATTACHMENT | C | - | - | - | - | 8 | YEAR 3 STANDING |
| YEAR 4 SEMESTER 1 | | | | | | | |
| EE4080 FINAL YEAR PROJECT | C | 0 | 0 | 12 | 12 | 4 | YEAR 4 STANDING |
| EE4XXX DESIGN ELECTIVE 1 | PE | 1 | 0 | 3 | 4 | 2 | |
| EE4XXX TECHNICAL ELECTIVE 1 | PE | 2 | 1 | 0 | 3 | 3 | |
| EE4XXX TECHNICAL ELECTIVE 2 | PE | 2 | 1 | 0 | 3 | 3 | |
| HW0310 PROFESSIONAL COMMUNICATION | GC | 1 | 1 | 0 | 2 | 2 | |
| BUSINESS & MANAGEMENT (HRM) | GE | 2 | 1 | 0 | 3 | 3 | |
| LIBERAL STUDIES | GE | 2 | 1 | 0 | 3 | 3 | |
| TOTAL | | 10 | 5 | 15 | 30 | 20 | |
| YEAR 4 SEMESTER 2 | | | | | | | |
| EE4080 FINAL YEAR PROJECT | C | 0 | 0 | 12 | 12 | 4 | YEAR 4 STANDING |
| EE4XXX DESIGN ELECTIVE 2 | PE | 1 | 0 | 3 | 4 | 2 | |
| EE4XXX TECHNICAL ELECTIVE 3 | PE | 2 | 1 | 0 | 3 | 3 | |
| EE0040 ENGINEERS & SOCIETY | GC | 2 | 1 | 0 | 3 | 3 | |
| GER ELECTIVE | GE | 2 | 1 | 0 | 3 | 3 | |
| SCIENCE, TECHNOLOGY & SOCIETY | GE | 2 | 1 | 0 | 3 | 3 | |
| TOTAL | | 9 | 4 | 15 | 28 | 18 | |
| GRAND TOTAL (Year 1 to 4) | | | | | | | 143 |