

## **MINOR IN EDUCATION STUDIES**

### **Rationale**

The purpose of this minor is to provide NTU students with the opportunity to gain exposure to key developments in education and training as future professionals in the knowledge-based economy. This will enhance employment possibilities as education and learning are integral aspects of all enterprises. Students will be made aware of the challenges of education and changes in educational systems in the light of rapidly changing socioeconomic environments. They will gain an understanding of the psychology of learning and thinking. They will be equipped with instructional design competencies and skills in the assessment and evaluation of learning and performance. They will also be exposed to ideas pertaining to educational enterprise and reform in the globalized market.

### **Objectives**

Upon completion of the Minor in Education Studies, students would be able to:

Gain knowledge of the Education System in Singapore and internationally

Gain knowledge of the psychology of learning, learning to learn skills and abilities for knowledge construction

Understand the theoretical and practical considerations underpinning the motivation of learners

Design training packages for short courses

Synthesize and apply educational principles in everyday and professional contexts

Acquire a broad range of critical reasoning skills to develop learners' thinking and analytical abilities

Understand how asynchronous online discussion can be used as an effective instructional strategy

Gain knowledge of constructivist learning theory and examples of how ICT tools are used to support self-directed learning and collaborative learning

## MINOR IN EDUCATION STUDIES

### Requirements

A total of 16 AU comprising three 3-AU, three 2-AU and one 1-AU courses will constitute a Minor in Education Studies. The courses are mostly independent of one another and no prerequisites are required. A student can choose to read the courses in any sequence. The only exception is AED20B whereby students are required to read AED10A prior to undertaking this course. All courses in the minor will be assessed entirely by coursework.

### Delivery and Assessment

The minor, comprising seven courses, will involve a variety of teaching and learning approaches – lectures, tutorials, on-line discussions, and seminar presentations. In an increasingly practice-oriented society, skills in collaboration, problem-based learning and project work are central and these practices will characterize the learning in this minor. Assessment will be primarily through practical work and assignments.

| No       | Course Code | Course Title   | AU | Assessment   |
|----------|-------------|--|----|--|
| 1        | AED10A      | Educational Psychology I: Theories and Applications for Learning and Teaching  | 2  | Team-based learning; written assignment                        |
| 2        | AED20B      | Educational Psychology II: Theories and Applications for Learning and Teaching | 1  | Problem-based learning; written assignment                     |
| 3        | AED28B      | Critical Perspectives on Education   | 3  | Group project; online discussion; individual assignment        |
| 4        | AED23C      | Critical Reasoning Skills for Effective Teaching                               | 2  | Group project; individual assignment                           |
| 5        | AED38A      | Motivating Pupils to Learn   | 3  | Team-based learning; written assignment; group project         |
| 6        | AED38B      | Facilitating Asynchronous Online Discussion                                    | 3  | Online discussion activities; written assignment; project work |
| 7        | AED38C      | Designing ICT-based Constructivist Activities                                  | 2  | Individual project   |
| Total AU |             |  | 16 |  |

## **Description of Courses**

### **AED10A Education Psychology I: Theories and Applications for Learning and Teaching (2AU)**

This course provides the foundation for understanding learners, learner development, and the psychology of learning and motivation. The ways in which these aspects influence the processes of learning will be considered, and proactive approaches to enhancing student motivation, learning, and thinking explored. Theories with a focus on students' psychosocial and cognitive development will be introduced and its implications for classroom-practice considered. In particular, the course will consider areas such as why and how some students learn or fail to learn, and how students' intellectual, social, emotional, personal and moral development occurs.

### **AED20B Education Psychology II: Theories and Applications for Learning and Teaching (1AU)**

This course aims to deepen student teachers understanding of the learner and the environment, and to equip them with applied skills and pedagogical approaches to become effective teachers. This course focuses on integrated application of the relevant theories and strategies to real-world classroom situations. Environmental aspects that facilitate and hinder learning will be discussed. Student teachers will synthesize and consolidate the key concepts learnt to establish explicit theory-practice links and analyse issues in authentic classroom scenarios. This enables the student teachers to leverage on the acquired theoretical-knowledge to make theory-based decisions to enhance teaching and the design of learning experiences.

### **AED28B Critical Perspectives on Education (3 AU)**

This course takes a multi-disciplinary approach to expose student teachers to the broad concerns and challenges in contemporary educational thought and practice. Topics include the history and philosophy of education, contemporary beliefs about the values and purpose of education as well as issues dealing with curriculum and pedagogy. The course will also explore the challenges of dealing with issues like inequality and elitism. These topics and issues will be rigorously examined with a view to stimulating individual reflection and class discussion. In the process of exploring these issues student teachers will be encouraged to reflect on what it takes in terms of skills, knowledge, and attitude to become a good teacher.

### **AED23C Critical Reasoning Skills for Effective Teaching (2 AU)**

The course will equip student teachers with a broad range of critical reasoning skills to develop the thinking and analytical abilities of their pupils in schools. Critical reasoning is based in part on mastery of basic rules of elementary logic, as well as practical reasoning skills. These skills are used for the analysis and evaluation of situations and arguments, as well as the formulation and articulation of good arguments and judgments. By learning how to formulate and articulate good

arguments, student teachers will acquire an appreciation of how these critical thinking skills can be used to facilitate multi and inter-disciplinary learning in their teaching. Working in groups, they will design innovative lesson plans that would help to stimulate interest in critical thinking and problem solving among their pupils.

### **AED38A Motivating Pupils to Learn (3 AU)**

This course is designed to help students understand the theoretical and practical considerations regarding motivating pupils in the classroom. Opportunities will be provided for participants to examine themes such as the psychological principles affecting pupil's learning, motivation and its relationship to classroom learning and pupil behavior, and theories of motivation. Throughout the course, students will be making connections of theory to practice – examining effective strategies to motivate reluctant and disinterested learners and designing and evaluating motivational strategies in the classroom.

### **AED38B Facilitating Asynchronous Online Discussion (3 AU)**

This course will discuss how asynchronous online discussion can be used as an effective instructional strategy within primary and secondary school contexts. The topics covered will include the integration of the asynchronous collaborative online discussion environment with the face-to-face approach, the role of the teachers in designing and evaluating the environment, and the use of scaffolds in the online discussion environment to facilitate critical thinking skills.

### **AED38C Designing ICT-based Constructivist Activities (2 AU)**

This course provides an opportunity for participants to learn constructivist learning theory and examples of how ICT tools may be used to support constructivist learning. We will also discuss how to assess constructivist learning. Opportunities will be provided for participants to design ICT enhanced learning activities using constructivist approach.

## Frequently Asked Questions

### (A) General Questions

1. What is the Minor in Education Studies all about?

In support of NTU's endeavor to broaden the undergraduate educational experience, NIE has developed a series of Minor programs. The Minor in Education Studies program is designed to provide NTU students with the opportunity to be familiar with key developments in education and training as future professionals in today's knowledge-based economy. It is clear that education is one of Singapore's key industries, and modern education policies, initiatives and practices are crucial in molding our future leaders.

2. Why should I consider taking up the Minor in Education Studies program?

This program would certainly provide you with a competitive edge and enhance employment possibilities as education and learning is an integral part of all enterprises. You will become more aware of the challenges of education and changes in educational systems in the light of rapidly changing socio-economic environments, and gain an understanding of the psychology of learning and thinking. You will also be equipped with instructional design competencies and skills in assessment and evaluation of learning and performance.

3. What are the courses in the Minor in Education Studies program and when are the courses offered?

| No       | Course Code | Course Title   | AU | Semester (s) Offered   |
|----------|-------------|--|----|--|
| 1        | AED10A      | Educational Psychology I: Theories and Applications for Learning and Teaching  | 2  | January semester only  |
| 2        | AED20B      | Educational Psychology II: Theories and Applications for Learning and Teaching | 1  | January semester only if a sufficient number registered for it           |
| 3        | AED28B      | Critical Perspectives on Education   | 3  | July semester only   |
| 4        | AED23C      | Critical Reasoning Skills for Effective Teaching                               | 2  | July semester only   |
| 5        | AED38A      | Motivating Pupils to Learn   | 3  | Both January and July semesters if a sufficient number registered for it |
| 6        | AED38B      | Facilitating Asynchronous Online Discussion                                    | 3  | January semester only  |
| 7        | AED38C      | Designing ICT-based Constructivist Activities                                  | 2  | July semester only   |
| Total AU |             |  | 16 |  |

4. Will exemptions be given if I chose to enroll in NIE's Postgraduate Diploma in Education (PGDE) program?

NIE would NOT be considering exemptions for students who have completed the Minor in Education Studies program when they embark on a PGDE program. The Minor in Education Studies program is designed to provide a broad view of the educational landscape in Singapore.

### **(B) Structure of the Program**

5. Do I have to complete all seven courses before I am awarded the Minor in Education Studies?

Yes. You will have to complete all seven courses to be awarded with a Minor in Education Studies to your degree. As such, it is paramount that you plan carefully in reading these courses during your undergraduate studies at NTU.

6. Will the 'Minor in Education Studies' AUs be counted towards the Unrestricted Elective (UEs) requirements?

Yes, they will. However it is important to note that if you choose to complete all seven courses in the Minor in Education Studies program, all the courses will appear in the transcript upon graduation with some of them appearing as additional courses taken in your main programme.

7. Do I need to complete the Minor in Education Studies courses in any particular order?

No, you do not have to. You can choose to read any courses in any order. Do note that some courses are offered in both semesters while others are only offered in one semester (semesters 1 or 2). It is important that you plan carefully in reading these courses during your undergraduate studies at NTU.

8. Do I need to achieve a minimum grade to progress to the next course in the program?

No, you do not have to obtain a minimum grade to progress to the next course. As long as you pass the course, the three, two or one AU(s) for each course will be awarded to your Unrestricted Elective or degree requirements.

9. Are there any pre-requisites for this Minor in Education Studies program?

No, there are no pre-requisites. The Minor in Education Studies program is open to all bona fide undergraduate students at NTU. Students who are completing the BA(Ed) or BSc(Ed) programmes at NIE are not eligible to offer the Minor in Education Studies.

10. Will there be examinations at the end of each course?

No, there will be no final examination component for all Minor in Education Studies courses. The rationale for this is to maximize the students' abilities in other areas, for example, authentic learning, critical thinking, planning, linguistics and aesthetics. Instead students will be assessed based on coursework which may include presentations, written assignments, group projects or class participation.

11. How are the courses being delivered? What is the assessment mode?

The courses will be taught by mass lectures, activities, group discussions, individual or group presentations and readings. The aim is to make the courses more interactive where students will have the opportunity to discuss issues highlighted in the lecture, develop presentation skills and group cohesion. Students will be graded based on written assignments, group projects, or group presentation on a given topic.

12. Will the courses be offered during special terms?

No, NIE would NOT be offering any Minor in Education Studies courses during the special terms.