

**NORTHBROOKS  
SECONDARY SCHOOL**  
SOARING YET ROOTED

*Sec 2 Subject  
Information:  
Coursework  
(NT)*



# Coursework subjects for Normal (Technical) stream:

- Students in the Normal (Technical) stream take a set of compulsory subjects and can have a choice of subjects (also known as elective subjects) at the upper secondary (Secondary 3 onwards). The school offers a range of elective coursework subjects to cater to the needs and interest of our students.
- **Coursework** refers to a rigorous research paper or design project where students to analyze, think critically, plan and carry out comprehensive, thorough research which they ask questions, examine issues, gather, record, collate, interpret and evaluate data to complete a working Artefact, Design Journal, Presentation Boards, Artwork and/or Research Paper.
  - The examination question paper will be issued in January of the national examination year.
  - Students are expected to work on their coursework during scheduled sessions in school after curriculum time.
  - Students are required to work independently and adhere to the scheduled submission timeline.



# Nutrition & Food Science (NFS) Syllabus in a nutshell

Nutrition & Food Science (NFS) is offered at the upper secondary level as an option for students who have an interest for the subject. The syllabus aims to provide students with a broad understanding of concepts in ***nutrition and health, food literacy and principles of food science***.

The NFS syllabus aims to develop students to:

- ✓ *lead a healthier lifestyle proactively through proper diet and nutrition;*
- ✓ *advocate sustainable food consumption by planning and making appropriate food choices; and*
- ✓ *apply principles of culinary science creatively in food preparation and cooking.*



# Nutrition & Food Science (NFS) Syllabus Content

## Nutrition and Health

1. Nutrients,
2. Water and Dietary Fibre
3. Diet and Health

## Food Literacy-

1. Food Management
2. Smart Consumer

## Food Science

1. The Science in Food Preparation
2. Reactions in Food During Preparation and Cooking
3. Sensory Evaluation of Food



# Nutrition & Food Science (NFS) Scheme of Assessment

Component	Weighting
Paper 1 – Written Examination	40%
Paper 2 – Coursework	60%

## Paper 1 (1.5hrs)- 80m

Written Theory paper

- Section A: 16 marks (multiple choice questions)
- Section B: 32 marks (short-answer-type questions)
- Section C: 32 marks (structured questions)

## Paper 2: Coursework (60%)- 60m

- Candidates will be given an assignment at the beginning of the examination year which must be conducted under teacher supervision.
- It should be completed for assessment by the end of July of the examination year. The assignment requires a problem-solving report and investigative approach, with an emphasis on investigation work.
- A minimum of **35 hours** of curriculum time must be assigned to discuss, facilitate and carry out the investigation and practical work as required.



# How do I know if Nutrition & Food Science (NFS) is for me?

- Entry Requirements
  - ✓ At least a pass in Food and Consumer Education (FCE) in Secondary 2
- Demands of the Syllabus
  - ✓ Good work ethics and time management skill
  - ✓ Commit to the rigour and demands of the coursework development process
  - ✓ Active use of research tools and work processing on the computer to coursework.

## You need to be able to:

1. work independently;
2. think critically;
3. put in consistent effort in the coursework;
4. have a curious mind and a passion for the subject.



# Post-Secondary NFS-related Courses

## HIGHER NITEC

Higher Nitec in Applied Food Science

## NITEC

- Applied Food Science
- Asian Culinary Art
- Western Culinary Art
- Service Management
- Hospitality Operations/Management
- Pastry and baking
- Food and Beverage Operations



# NFS-related Career Options

- ✓ Culinary Expert / Chefs
- ✓ Dietitians
- ✓ Food Manufacturer
- ✓ Food Scientist/Flavorists
- ✓ Food Microbiologist
- ✓ Food Technologist
- ✓ Healthcare Aides
- ✓ Nutritionists
- ✓ Personal Trainer





# FAQs (NFS)

## Q1: What does coursework mean?

A: Coursework focusses on the background study of the task; decision making process of the three final dishes based on the task in relation to the food preparation skills set list; ability to record observations and explain learning acquired from the outcomes of exploration; ability to record a methodical approach in the production and presentation of the final products. The evaluation be a recording the sensory evaluation of the dishes prepared presented either in video or prose.

## Q2: What is the format for coursework report submission?

The coursework report must be in presentation format and submitted electronically. The recommended typeface is Arial, font size range between 18–22. The page/slide requirement of the report is between **25–35 slides**, including digital photographic evidence of the Exploration, final dishes in the Execution and video/prose mode for Evaluation criteria.



# FAQs (NFS)

## Q3: What are the components in Coursework?

A: There are 6 components for Coursework . The components are Background, Decision-making, Exploratory Studies, Execution, Evaluation.

## Q4: Why is NFS offered to a maximum of 20 students?

A: The Culinary Lab is considered a special room which limits the number of students due to safety constraints. Also the NFS practical skills and techniques taught need to be closely supervised and monitored, hence a smaller class size will be favorable.

## Q5: Must I be proficient in culinary skills to apply for NFS?

A: No, all technical skills will be taught in the curriculum to prepare for national examinations. However, it will be advantageous if you are already equipped with some prior knowledge. Another advantage is to have access to basic kitchen equipment at home for culinary practice.



# FAQs (NFS)

Q6: How much time is required to complete the coursework?

A: A duration of 35 hours is specified for the coursework and must be completed in school.

Q7: Is NFS a relevant subject for ITE courses?

A: Yes, For ITE courses, NFS can be considered as one of Best 2 or Best 3 Other Subjects for aggregate computation.



# ART Syllabus in a nutshell

The Art syllabus is a journey of discovery where students test new concepts, raise questions, decipher problems and invent solutions. They are challenged to unleash their imagination, forge fresh perspectives and express their views by:

- ✓ drawing out the creative energy of students with a broad and diverse range of media, including the use of new digital media as a tool for art making and designing.
- ✓ applying their knowledge to create solutions to authentic tasks in art and design.
- ✓ eliciting the students' innate sense of wonder about the world and provokes their curiosity, encourages observation and celebrates discovery.
- ✓ acquiring meaningful knowledge about themselves and their work by engaging with and discussing the works of artists and designers.



# ART Syllabus Content

## FOUNDATIONAL STUDIES

### 1. Basic Drawing

Students learn to use drawing as a mode and medium of documentation and self-expression.

### 2. Basic Digital Imaging

Students learn digital imaging skills and methods of digital image manipulation.

## ELECTIVE STUDIES

Media Components	Examples
Fine Art (2-D)	Painting, calligraphy, collage, printmaking
Fine Art (3-D)	Sculpture, assemblage, ceramics, glass
Design (2-D)	Graphic design, illustration, computer-generated graphics, fashion/costume illustration
Design (3-D)	Interior/architectural models, product/package design, jewellery, environmental design
Textiles/Fibre Art	Weaving, screen printing, batik, tie and dye
Digital/ Lens-Based Media	Photography, multi-media, film, video, animation

# ART Assessment Objectives

The four assessment domains applied to the Portfolio paper are:

1. Communication of Ideas
2. Aesthetic/Design Qualities
3. Control of Materials and Technical Processes
4. Personal Response

## ART Scheme of Assessment

Paper	Description	Examination Duration
Paper 1	Portfolio	Not Applicable
Paper 2	Art Task	3 hours

### Paper 1: Portfolio

- Submission of collection of three art and/or design works that best represent the candidate's abilities in at least two differing media. Submission of portfolio is in the month of June of the examination year.

### Paper 2: Art Task

- The topics for the Drawing and Painting exam (Paper 2) are released 3 weeks prior to the Drawing and Painting 3-hour exam.
- For the Drawing and Painting exam (Paper 2), candidates must submit five A3 size preparatory boards (double-sided) together with the drawing and painting artwork they will sit for.
- The A3 size preparatory boards are to be prepared and ready before the day of the drawing and painting exam.



# How do I know if ART is for me?

- Entry Requirements
  - ✓ At least a pass in Art in Secondary 2
  - ✓ An inquiring mind, a spirit of experimentation and a passion for the visual arts
- Demands of the Syllabus
  - ✓ Spend time to hone their sensitivity to materials and processes to develop a firm grounding in both the practical and theoretical aspects of Art and Design.
  - ✓ Attend enrichment activities such as workshops, artists' talks and learning journeys to art galleries and museums organised by the school or MOE.
  - ✓ Participate in art-related competitions to sharpen their skills and participate in school or national exhibitions.
  - ✓ Commit to the rigour and demands of the art curriculum and art development process.

## You need to be able to:

1. work independently for most assignments;
2. conduct visual research by taking their own pictures and reading about art, artworks and artists;
3. be diligent in completing their drawing and painting assignments at home.



# Post-Secondary ART-related Courses

## HIGHER-NITEC

- Filmmaking (Cinematography)
- Interactive Design
- Performance Production
- Space Design Technology
- Visual Merchandising
- Games Art & Design

## NITEC

- Filmmaking (Cinematography)
- Interactive Design
- Digital Animation
- Fashion Apparel Production & Design/Product Design
- Space Design (Architecture)(Interior & Exhibition)
- Visual Communication/Effects





# ART-related Career Options

- ✓ Art Gallery Curator
- ✓ Game Designer/Programmer/Producer
- ✓ Graphic Designer
- ✓ Media Industry - broadcast, producer, camera professional
- ✓ Product Designer
- ✓ Visual Graphics Professional
- ✓ 2D/ Animation/ 3D Art Visual Artist
- ✓ Architectural Technology
- ✓ Filmmaking (Cinematography)
- ✓ Interactive Design
- ✓ Motion Graphics
- ✓ Performance Production
- ✓ Visual Effects
- ✓ Visual Merchandising



# FAQs (ART)

## Q1: What is Paper 1-Portfolio?

A: The portfolio collection **of three art and/or design works** that best represent the student's abilities in at least two differing media. All three art and/or design works must be accompanied by a brief description of the task/s leading to the creation of the final art and/or design work. Each description should not be more than 50 words in length. The portfolio submission is considered complete only when each of the three art and/or design works is submitted with a description. Submission of portfolio is in the month of June of the examination year.

## Q2: What is Paper 2-Art Task?

Paper 2 (Art Task) provides 6 questions issued from which students are to choose one. The scope of the questions lies within the following six categories: Fine Art (2-D), Fine Art (3-D), Design (2-D), Design (3-D), Textiles/Fibre Art and Digital/ Lens-based Media with **ten weeks** to carry out preparatory studies and record their research and studies to the chosen task in the answer booklet provided. Students are to execute their final solution to the chosen task on a paper of size A3 or A2 during a three-hour examination.



# FAQs (ART)

**Q3: Must my child be proficient in different mediums such as Acrylic painting and Watercolour painting?**

A: No, the various mediums will be taught to your child. However, it will be advantageous if you are already equipped with prior knowledge of the skills used in these mediums.

**Q4: Is Art a relevant subject considered for aggregate computation to the Pre-University (i.e. Junior Colleges and Millennia Institute), Polytechnic and ITE courses?**

A: Yes, For ITE courses, Art can be considered as one of Best 2 or Best 3 Other Subjects for aggregate computation.



# Design & Technology (DT) Syllabus in a nutshell

The Design & Technology (D&T) syllabus is designed to engage students in designing and prototyping ideas through applying technology.

Through the design process, students cultivate creative, critical and reflective thinking to make sense of their learning and to develop related dispositions and skills using graphical means and technology.

The D&T syllabus aims to to *provide designing and prototyping opportunities via the Design Process for candidates to:*

- ✓ *develop design-related dispositions*
- ✓ *acquire design techniques and strategies*
- ✓ *consolidate a sound working knowledge of technology (materials, workshop processes, mechanisms and electronics)*



# Design & Technology (D&T) Syllabus Content

## A KNOWLEDGE WITH UNDERSTANDING

- designing and prototyping
- nature of the design process
- plan and manage their project

## B DESIGN THINKING SKILLS

- detect, frame and understand everyday needs for design opportunities
- generate tentative ideas through inquiry
- analyse and synthesise relevant knowledge and information

## C DESIGN MANIPULATING SKILLS

- sketch proposed design solution
- build mock-up(s) to test ideas for decision making
- work with appropriate technology for prototyping



# How do I know if Design & Technology (D&T) is for me?

- Entry Requirements
  - ✓ At least a pass in Design & Technology (D&T) in Secondary 2
- Demands of the Syllabus
  - ✓ Subject is primarily project-based over a duration of 20 weeks.
  - ✓ Engage in recurring problem-solving design activities.

## You need to be able to:

1. have the self-discipline in managing the project within the given timeframe;
2. be competent in drawing techniques for design communication.



# Objectives & Scheme of Assessment

Paper	Duration	Assessment Domains			Total
		A Knowledge with Understanding	B Design Thinking Skills	C Design Manipulating Skills	
1 Written Examination	1 hour	10%	10%	10%	30%
2 Design Project	20 weeks	20%	20%	30%	70%
Overall		30%	30%	40%	100%

- The Design Project is an individual coursework-based examination. The examination will be conducted over **20 weeks** from the question paper release, excluding school holidays. Candidates will be required to work on a **design and prototyping project** based on the examination question.

# Post-Secondary D&T-related Courses

## HIGHER-NITEC

Higher Nitec in Visual Merchandising

Higher Nitec in Interactive Design

Higher Nitec in Architectural Technology

Higher Nitec in Visual Effects

## NITEC

Nitec in Fashion Apparel Production & Design

Nitec in Architectural Technology

Nitec in Digital Animation

Nitec in Interior & Exhibition Design

Nitec in Product Design

Nitec in Visual Communication





# D&T-related Career Options

- ✓ Graphic Designer
- ✓ Industrial Designer
- ✓ Web Developer
- ✓ Software Developer
- ✓ Multimedia Artist
- ✓ Engineer, Architect
- ✓ Landscape Architect/Designer
- ✓ Interior Designer
- ✓ Renderer
- ✓ Product Designer



# FAQs (D&T)

**Q1: Will D&T be helpful for me if I plan to go ITE?**

A: Yes, having knowledge in the processes learnt during the study of Design and Technology will greatly assist the student in design courses in ITE. Other courses that have some relevancy to Design and Technology include Medical Technology.

**Q3: I am passionate about D&T, but I failed my Secondary 2 D&T, will I still have a chance?**

A: A pass is required for a chance to qualify for Upper Secondary D&T, and placement is decided by choice and aptitude of the batch of students.

**Q4: Why is D&T offered to a maximum of 20 students?**

A: The D&T workshop is considered a special room which limits the number of students due to safety constraints. Also the D&T practical skills and techniques taught need to be closely supervised and monitored, hence a fixed class size of 20 is mandated.



# D&T Useful links

- Pls scan the QR code to SEAB syllabus info, and other useful info



# Useful links

- Direct School Admission – JC

<https://www.moe.gov.sg/admissions/direct-admissions/dsa-jc>

- POLYTECHNIC EARLY ADMISSIONS EXERCISE (POLY EAE)

<https://www.moe.gov.sg/admissions/direct-admissions/eae>

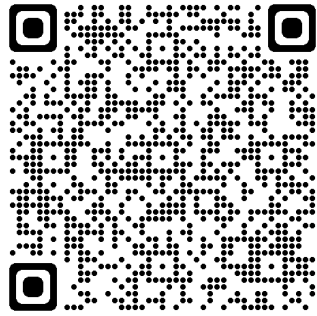
- ITE Early Admissions Exercise (ITE EAE)

<https://www.moe.gov.sg/admissions/direct-admissions/ite-eae>

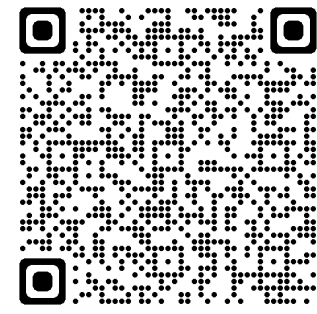


# Useful links-Syllabuses Examined in 2024

O-Level:



N(A)-Level:



N(T)-Level:

