

Approved Specialist Programs

SCIENCE HORIZONS AND ENGINEERING SPECIALIST



INFORMATION FOR PARENTS OF PROSPECTIVE SCIENCE SPECIALIST STUDENTS

Science Horizons Background Information

Through the Science Horizons Program, Newton Moore Senior High School offers an exciting and stimulating specialist program of study for selected students with strong ability in the applied and pure sciences. Students engage in an enriching in class and extra curricular program that fosters their interests and abilities in these important areas. Students explore aspects of contemporary science and are encouraged to explore and follow their special interests. They gain access to special opportunities through complementary links with Murdoch University, UWA and other ECU science – related institutions. The courses may include a dimension of work placement, research and field work. Participation in the Science Horizons Program commences Year 7. Given satisfactory progress, students are invited to continue their involvement in the Science Horizons Program to the completion of Year 12.

Engineering Background Information

Through the Engineering Program, Newton Moore Senior High School offers an exciting and stimulating specialist program of study for selected students with strong ability in the design and technology sciences and mathematics. Students engage in an enriching in class and extracurricular program that fosters their interests and abilities in these important areas. Students will be equipped with skills they need to pursue a range of careers, including: electrical, robotic, environmental and civil engineering as well as drafting and building design.

The Approved Specialist Program in Engineering is delivered in partnership with industry companies such as GHD, BHP Billiton Worsley Alumina Simcoa, Lowes Churchill & Associate and Doral and with support from the Edith Cowan University. The courses may include a dimension of work placement, and excursions with participation in real life projects, competitions and exhibitions to inspire students to turn their skills into a career. Participation in the Engineering Program commences in Year 7. Given satisfactory progress, students are invited to continue their involvement in the Engineering Program to the completion of Year 12.

Costs

A cost for materials for the year is approximately \$50. The amount will be included in each years Costs and Contribution handbook. There may be additional costs associated with specific purpose activities such as camps, excursions, visiting speakers and competitions. **Parents are required to pay the full costs and contributions for each year.**

School Expectations

The school expects students to be committed to their participation in the Science Horizons and Engineering Programs. Their commitment will be evident in the extent to which students are self-motivated, hard-working and persistent. Students who enter these programs will be required to devote out-of-school time to extension and enrichment activities. There may be periods of time when students will be away from school exploring aspects of science or engineering and students will be expected to ensure they do not fall behind in their studies. Students are to have Science Horizons or Engineering embroidered on their school Shirts. This service is provided by Badgers, Unit 3, 13 Sandridge Road, Bunbury.

Placement in Science Horizons and Engineering Programs

The number of students invited to participate in the Engineering is limited. Students are selected through a progressive and comprehensive process. This includes:

- Applications complete an official Application for placement. This includes a form for parents / guardians to complete and a form for the students to complete.
- References are to be supplied – a confidential reference from the applications current school on an official form provided.
- Applicants undertake an aptitude test with an emphasis on problem solving in an engineering, science and maths context.
- School Report
- NAPLAN

Testing and Scholarships

Testing is required for students to enter the program. The school may offer some scholarships to students wishing to join either of these programs. Scholarships will be awarded based on a written application, test performance, school academic and behaviour record.



Science Horizons and Engineering Specialist Application

Number your Preference

Science Horizons

Engineering

PARENT FORM

Student Details

First Name: _____ Surname: _____

Date of Birth: _____

Current School: _____ Year: _____

Year Intending to Commence Approved Specialist Program: _____

Academic Achievement

1. Please attach

- A copy of school reports for the last two years.
- Naplan and MSE results.

2. (a) Has your child participated in WA Education Department Primary Extension and Challenge (PEAC) program?

Yes

No

If yes what year(s) _____ at which centre _____

If no give details of any other extension program in which your child has participated:

3. Provide results obtained in any State or National competition or activity you consider relevant. (Photocopies of result slips will suffice)

Competition / Activity	Year	Result

4. What do you consider to be your Child's academic strengths and interests in the following areas?

Science:

Mathematics:

Design and Technology:

What do you consider to be your child's personal strengths?

Describe any relevant special interest or ability of your child's: (eg drawing, dinosaurs, robotics, computers)

By placing a cross (x) on the line, indicate the extent to which your child demonstrates each of the following:

	Very Strong	Limited
Initiative		
Insight into cause-and-effect relationships		
Problem – solving ability		
Observation Skills		
Depth of knowledge in specialized interest		
Persistence in completing tasks		
High personal standards		
Commitment to learning		

Please provide any other information which you believe supports your application.

Parent / Guardian Details (Please Print)

Parent / Guardian 1:

Title: _____ First Name: _____ Surname: _____
Relationship to Student: _____
Residential Address: _____
Suburb: _____ Postcode: _____
Postal Address: If different from Residential) _____
Suburb: _____ Postcode: _____
Home Phone: _____ Mobile: _____
Work Phone: _____ Email: _____

Parent / Guardian 2:

Title: _____ First Name: _____ Surname: _____
Relationship to Student: _____
Residential Address: _____
Suburb: _____ Postcode: _____
Postal Address: If different from Residential) _____
Suburb: _____ Postcode: _____
Home Phone: _____ Mobile: _____
Work Phone: _____ Email: _____

Parent / Guardian Permission

I / we give my / our permission for Newton Moore Senior High School to obtain relevant information from my / our child's present school.

I / we understand to remain in the Science Horizons / Engineering Program, students are expected to display a positive and enthusiastic attitude towards engineering and science, achieve high academic results and maintain a good behaviour record at school including maintaining good standing.

I / we agree to pay school fees and contributions and extra expenses which may be required as listed in the Charges and Contributions Handbook.

Signature 1: _____ Signature 2: _____

Date: _____ Date: _____



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Science Horizons and Engineering Specialist Application

STUDENT FORM

Students who are seeking placement in the Newton Moore Senior High School Science Horizons / Engineering Programs are invited to complete this form and submit it as part of their application for placement and return to Newton Moore Senior High School.

The form is to be completed by the student without assistance.

There are three questions. The length of response to each question should not exceed 100 words.

NAME OF STUDENT: _____

CURRENT SCHOOL: _____ Year: _____

QUESTION 1

In what ways do you believe you will benefit from being part of the Science Horizons / Engineering Program?

QUESTION 2

What strengths will you bring to the group of students involved in the Science Horizons / Engineering Program?

QUESTION 3

How you believe science / engineering could contribute to solving a major problem in the world?

Declaration

The above ideas are my own and I have completed this form without assistance from anyone.

Student Signature: _____ **Date:** _____

Science Horizons and Engineering Specialist Application SCHOOL REFERENCE FORM (Confidential)

This form should be given to the teacher of the student's current school. It should be completed by the current teacher or by another appropriate member of staff.

If you would like an electronic version of this form please contact the Enrolment Officer on 9722 2421 or email Tania.Martyn@education.wa.edu.au

Student Details

Name: _____

Details: _____

Current Year of Schooling: _____

Referee Details

Name: _____

Position: _____

School: _____

Thank you for completing this reference. It would be appreciated if you could comment on the suitability of the applicant for a position in our Science Horizons / Engineering Program using the headings provided below.

Academic Ability

Please indicate comparative ability relative to students of the same age in Science, Mathematics and Reading.

	Outstanding	Very Good	Average	Below Average
Science				
Mathematics				
Reading				

Personal and Social Development

Please comment on personal and interpersonal skills and abilities relative to other students of the same age. (Please tick the most appropriate box).

Attributes	Outstanding	Very Good	Average	Below Average
Speed and depth of learning				
Critical thinking skills				
Perception and insight				
Ability to work independently				
Ability to work productively in a group				
Originality				
Curiosity				
Commitment and Personal Standards				

Other Comments

Please circle your level of endorsement for the applicant's inclusion in the Science Horizons / Engineering Program.

Highly Recommended

Recommended

Not Recommended

Signature of Referee: _____ Date: _____

Signature of School Principal or Teacher: _____ Date: _____