SHIKHAR ACTIVITY OUTSOURCE CONSENT FORM - 2018

(DEADLINE TO SEND FORM – February 4, 2018)

I, parent of …………………………….....................................ID No. …………… class ……. section………., know and have understood all details pertaining to the activity chosen for the year.

Charges as applicable for Outsourced Activities annually:

Rs 3300	**:**	**Chess**
Rs 5100	**:**	**Aero Modeling (Level 1/Level 2)**
Rs 3600	**:**	**Robotics Level 1, Rs 4200 Robotics Level 2**
Rs 4200	**:**	**Video and Film making**
Rs 6000	**:**	**Raspberry Pie**

We have chosen to pursue ……………………………. As 'Club' activity. I am sending the payment of Rs ……………….…………… for the same by ……………………………………….…………..…………………..

1) **Demand Draft in favour of The Sanskaar Valley School: Number: ……………………………………….. Dated ……………**
2) **Cash (to be submitted to the school accounts office).**

Signature ……………………………………………………………… Date ………………….………….

Name: ……………………………………………………………… Mobile ………………………….

Learn how to play chess

A board game of strategic skill for two players, played on a chequered board on which each playing piece is moved according to precise rules. The object is to put the opponent's king under a direct attack from which escape is impossible (*check mate*)

Chess is an indoor game played by two players, who we'll call "White" and "Black". It is played on a board of 64 squares arranged in an 8 x 8 grid with alternate color of black and white. Each square can be empty or occupied by a piece.

Module 1:

- Basics About Chess- Learn how to write chess
- Duration : 5 to 10 Lessons
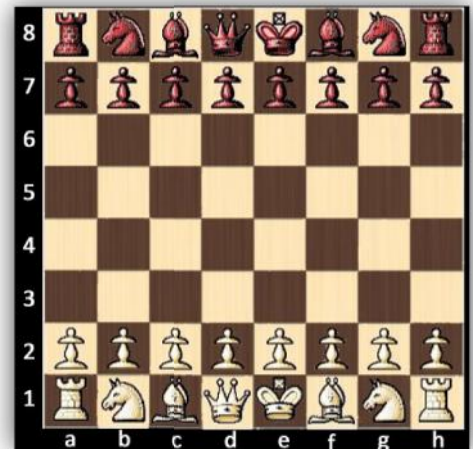
Module 2:

- The Opening
- Duration : 10 Lessons

Module 3:

- Middle game : Basic tricks
- Duration : 10 Lessons

Module 4:
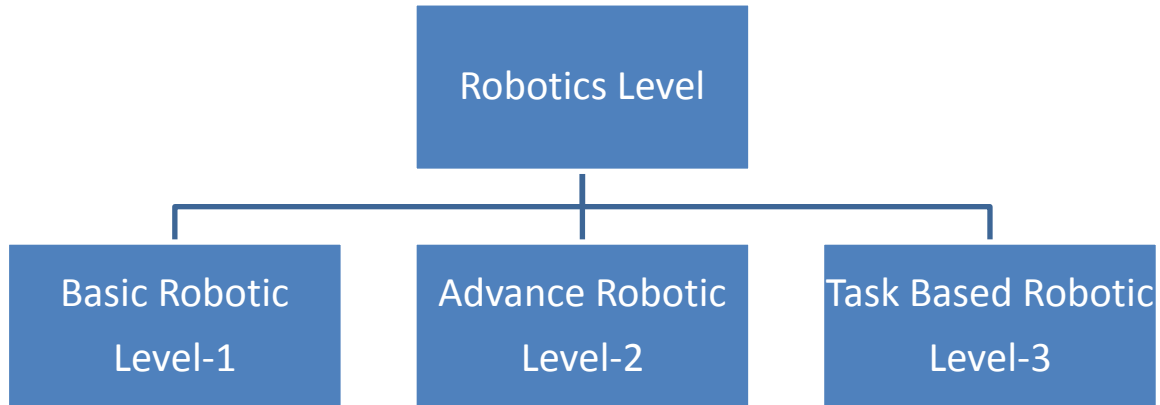
- Easy end game
- Duration : 5 Lessons

*** Charges

Per student charges will be 3300/- and minimum required strength is 30 students.

ROBOLOGY

Hello , Mrs. Lalwani. Here r thr details for the robology robotic classes.

Robology Classroom program, has been categorized in 3 different levels:

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                    ┌─────────────────┐
                    │  Robotics Level │
                    └─────────────────┘
              ┌────────────┼────────────┐
    ┌──────────────┐ ┌──────────────┐ ┌──────────────────┐
    │ Basic Robotic│ │Advance Robotic│ │Task Based Robotic│
    │   Level-1    │ │   Level-2    │ │     Level-3      │
    └──────────────┘ └──────────────┘ └──────────────────┘
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- **<u>Basic Robotics</u>** – In the session of basic robotics, we makes following,

1. Introduction of robotics
2. 4x4 gearing car
3. Use of touch sensor , make a touch sensor car
4. Remote control car
5. Make your own model-1
6. programming class-1
7. Base ball better
8. Black line follower
9. Use of ultrasonic sensor , make a ultrasonic car
10. Make your own model-2
11. Programming class-2
12. NXT Mini golf
13. NXT walker
14. NXT caster bot
15. Make your own model-3
16. Programming class-3
17. Mini sumo bot
18. NXT explorer

19. Hammer car
20. Make your own model-4
21. Programming class-4
22. Claw stricker
23. NXT inch worm
24. Steering rover
25. Make your own model-5
26. Programming class-5
27. Machine gun
28. Robo arm
29. practice for practical test
30. Practical exam

- ## **Class Structure –**

1. We'll be taking 24 to 30 classes in a session.
2. 30 different models in a session.
3. One model in a class.
4. We are Providing 8 Robotic kits.
5. Minimum enrollment, 10 student and maximum 40 student in a class.
6. 2 to 3 robotic trainers conduct the classes.
7. Provide one kit for each team (6 to 8 student in a team).

- ## **Fee Structure –**

According to the students enrollment, if the total students is ,

10 to15 students, fee 3200/- per student ,
16 to 20 students, fee 2800/- per student,
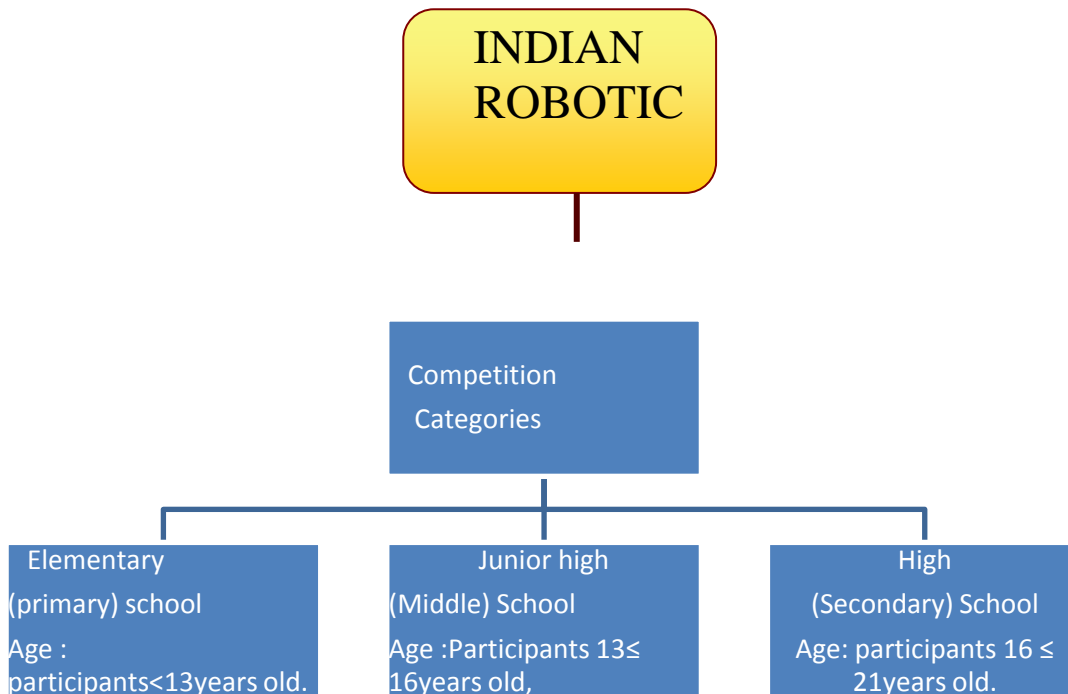20 to 24 students, fee 2600/- per student,
25 + students, fee 2500/- per student,
      For one year.

ROBOLOGY

- ## **Competition**

Every academic year a national level competition is conduct, under the heading of INDIAN ROBOTIC OLYMPIAD .
The Indian robotic Olympiad has three competition categories each team participate in one categorie,

INDIAN ROBOTIC

Competition
Categories

| Elementary (primary) school Age : participants<13years old. | Junior high (Middle) School Age :Participants 13≤ 16years old, | High (Secondary) School Age: participants 16 ≤ 21years old. |

 Competition starts form of regional competition ,then top 4 selected teams will qualified for national completion and after top 4 selected teams will qualified for the World Robotic Olympiad .

Indian Robotic Olympiad regional in the month of September 2016,
Indian Robotic Olympiad national in the month of October 2016 in Delhi,
World Robotic Olympiad in the month of November 2016 in India.

Thanking you
Nitin Gupta

ROBOLOGY

Dear Madam,

The Boxx Studios, has a vision to develop and deliver innovative learning, Training and content development services in the field of Cinema. The Training & Development division of *TBS* specializes in Photography, Cinematography, Film Making, Art & Direction, Acting, 2D/3D Animation, Motion graphics, Corporate AV's, Compositions, Editing etc. The team of professional with their recognized knowledge and with their expertise in specific areas leverage Training & content Development to a niche level. These dynamic, inspiring individuals deliver highly interactive training that incorporates small group exercises, self-assessment, imagery, role playing and practical learning techniques to imprint knowledge for results that last.

With a small brief we would like to extent are proposal of the workshop planned for junior to senior classes at Sanskaar Valley School. The initial course specially designed for students at the school for both the separate sections in the field of cinema are detailed as separate annexure for your kind reference. The below mentioned workshop will be carried for Single lecture a day, as per schedule and the said duration may be extended (post intimation) depending upon the need for the activity planned for hands on experience with practical exposure. Students may also get an opportunity to showcase their talent on the online Channel "Chai Stories" on YouTube.

Commercials for training workshop to be held at Sanskaar Valley School premises and the basic equipment's required to learn the skills must be possessed with the students. Professional equipment's, if required may be arranged by school or by The Boxx Studios on need basis.

The Trainer charges will be Rs. 3000 per day irrespective of the number of participants. The trainer/expert visiting at school may vary (prior intimation) depending upon the requirement of the topic to be delivered or practical exposure desired.

Attachment: Draft Course outline of Photography and Videography

Thanks & Regards,
Minhaj Abdullah
Director, The Boxx Studios

PHOTOGRAPHY

TOPIC	STYLE	DURATION
1. Concepts of Photography	Presentation	
2. What is composition	Presentation + Practical	
3. Controlling Exposure	Presentation + Practical	
4. Other important setting in camera	Presentation + Practical	
5. Water photography	Presentation + Practical	
6. Rules of composition	Practical	
7. Simplicity in photography	Practical	
8. Rules of 3rd in Composition	Practical	
9. Leading lines in photography	Practical	
10. Framing in photography	Practical	
11. Texture shooting	Practical	
12. Creating forms	Practical	
13. Creating shapes in photography	Practical	
14. Shooting Motion	Practical	
15. Color balancing	Practical	
16. Contrast	Practical	
17. Proximity	Practical	
18. POV Shoot	Practical	
19. Shooting Drama	Activity Based	
20. Creating Picture profiles	Activity Based	
21. Tricky Photography-1	Practical	
22. Tricky Photography-2	Practical	
23. Creating portfolio	Activity Based	
24. Working for exhibition	Activity Based	

VIDEOGRAPHY

TOPIC	STYLE	DURATION
1. Concepts of Video	Presentation	
2. What is composition	Presentation + Practical	
3. Understanding Camera settings	Presentation + Practical	
4. Understanding Camera settings	Presentation + Practical	
5. Different types of Camera Angles -1	Practical	
6. Different types of Camera Angles -2	Practical	
7. Different types of Camera Angles -3	Practical	
8. Different types of Camera Angles -4	Practical	
9. Shooting Interviews	Practical	
10. Shooting for nature	Practical	
11. Understanding Lights	Practical	
12. Shooting for Documentary	Practical	
13. Shooting for News	Practical	
14. Working with Camera shots	Practical	
15. Camera Movements	Practical	
16. Editing Videos -1	Activity Based	
17. Adding Music	Activity Based	
18. Editing Videos -2	Activity Based	
19. Adding Text and logos	Activity Based	
20. Video Assignments	Practical	
21. Video Assignments	Practical	
22. Video Assignments	Practical	
23. Creating portfolio	Activity Based	
24. Working for exhibition	Activity Based	

AEROMODELLING

This is an activity which deals with designing & construction of aircraft models, here we cover the entire basic and advance aerodynamics, designing and flying depending on the level of the students attending the workshop/training.

Other than Aeronautical engineering, the workshop covers basic science theories & uses as well as other branches of Science & engineering like Mechanical, Electrical and Electronics as all these techniques are utilized in making a complete aircraft model.
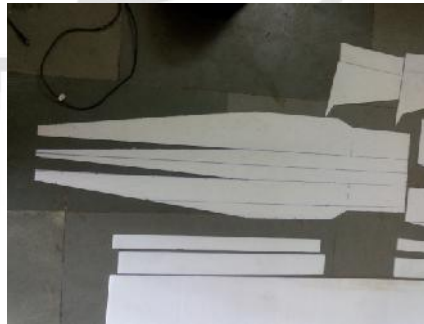
Module levels

We have divided Aero modeling as a structured course in different levels of modules & each module is allotted with its specific topics & model of aircraft to be built.

Module 1 (chuck glider) – this is a small basic plane without any power source made up of special wood called Balsa , it flies just by throwing it into the air & comes down with a gliding tendency. This is the first basic step to start Aeromodelling & to understand aerodynamics. The following topics will be covered in this module:-

- ➢ Basic laws & principles of science.
- ➢ Basics of aerodynamics.
- ➢ Parts of an airplane
- ➢ Basic theory of flight.
- ➢ Basic knowledge of materials related to chuck glider.
- ➢ Foam plane.
- ➢ Making of chuck glider.
- ➢ Flying of chuck glider.
- ➢ Electric hanging planes

Module 2 (Radio Controlled plane) – This is the practical aspects of Aeromodelling of fully controlled & fully functional aircraft model where in the airplane is completely controlled remotely on ground as well as in air without any physical linkage with its controller.

In this module, the participants are taught, how to make a radio controlled plane with various components. The aircraft is built by the students and thereafter test flown as a competition between the groups/students. A merit certificate is also given to the best student/team to encourage them to be more creative. The following topics will be covered in this module:-

- ➢ Control surfaces of aircraft.
- ➢ Material discussion of Radio Controlled airplane.
- ➢ Structural knowledge for light weight construction.
- ➢ Plane building.
- ➢ Crafting skill development, tools & hardware knowledge.
- ➢ Electronic motors & other electronic use.
- ➢ Development of complete airplane.
- ➢ Flying.

This module is divided into two segments of RC planes i.e.

    A) *Trainer plane*

    B) *Jet plane*

Trainer plane – this is a slow & very stable airplane, used for flying training

Jet plane – this is a profile of real jet, this is faster & able to do fast aerobatics.

see first two pictures of the same planes to be built.

Module 3 (Flying Training) – This is a 10 days session in which student will learn how to fly the basic trainer aircraft. This session divided into two segments –

1) **Vertual training** – in this session student will learn how to fly the aircraft on computer with the help of stimulator.
2) **Buddy Flying** – in this session student will fly real aircraft model with the help of master & student system called Buddy system.

Out side events

Now a days Aeromodelling is a very popular activity in technical intitutions as a technical skill development activity. Number of institutes are organizing aeromodelling championships in India including NITs & IITs.

List of few colleges & tentative dates are :-

1) IIT Mumbai – 2nd or 3rd week of dec. (Zonals of Boeing National Championship)
2) IIT Madras – last week of dec. (Zonals Boeing National Championship).
3) IIT Kharagpur – last week of jan. (Zonals Boeing National Championship).
4) IIT BHU Varanasi – last week of feb. Open Championship.
5) IIT Kanpur – Last week of march (Zonals Boeing National Championship).
6) IIT Delhi – April, **Boeing National Championship**.

Program highlights & Kit contents:-

➔ *Training will be conducted with the help of Audio-Visual presentation for basic information & followed by the practical methods in which students will build the models.*

➔ *Each participant will be provided with their individual instruction booklet & basic theory booklet modules of respective airplane.*

- *Each participant will get five take away kits. (**two chuck gliders, two foam planes & one electric hanging plane**)*
- *Development of RC plane will be in a group of 5 students.*
- *Each participant will have certificate of participation.*
- **Electronics of all the models which are made during RC Plane workshops will remains with us. If institute or any student or a group wants to keep the model with electronics & radio set they have to purchase it separately.*

Benefits

- Improvement of practical engineering skills.
- Enhance their abilities in imagination and designing skills.
- Get friendly with multiple engineering skills at a time.
- Learn to make things creative with the help of scratch.
- Improvement in ability of self employment.
- Enhance their deliverance.
- Learn to work in a team.

Module details

S. No.	Activity	Time
1	Paper plane & theory	2 days
2	Foam plane (2)	2 days
3	Chuck glider (2)	4 days
4	Electric hanging plane	3 days
5	Trainer plane	5 days
6	Jet plane	4 days
7	Flying training	10 days *(during founders stay back)*
Tot1al	***Seven models***	**30 days**

* Time duration may increase or decrease depends on student's interest & working (+/- 2hours)

****Charges

Per student charges will be 5100/- per year and maximum required strength is 25 students.

Raspberry Pi and Python Learning Module

Dear Parent,

Your ward along with many more students had expressed the desire of learning programming language Python and the Raspberry Pi technology during the SUPW time in school. Considering the request from many students, we were looking for professional in the field. In this process, we had invited 3 agencies to make presentation before the students.

We are happy to inform you that in consultation with students we have finalised Robodia Technology Solutions Pvt. Ltd. to offer the said course for our students.

The agency has shared the detailed description of 30+ hours course of Raspberry Pi boot camp that we intend them to conduct at our institute. The same is enclosed with this circular for your kind perusal.

As the school is outsourcing professional to conduct classes for the said course, professional course fee is involved which is to be borne by the student. The course fee will depend on the number of students enrolled for this course.

No. of students enrolled	Course Fee per child
<10	Rs. 6000/-
10-20	Rs 5000/-
20+	Rs 4500/- per child

Also please make note of the following:

1. All the necessary hardware and software required for the course will be provided by the agency.
2. Various sections of course will incorporate quizzes and assignments that are mandatory to complete before moving forward. Abstaining the assignments and quizzes would affect overall performance and student might not be eligible for a certification of completion.
3. All students will be required to register on the LMS (Learning management system), an effective online teaching tool. All communications including testing and assignments would be delivered through the LMS only.
4. The classes for grade 9th and 10th will be conducted on Tuesdays and Wednesday during SUPW time and for 11th and 12th on Tuesday during SUPW time and on Wednesday during Sports time. In case class 11 and 12th participants want to stay back till 2:45 pm on class days to practise with mentors, they need to produce written permission from parents.
5. If the students are unable to complete the course by 2nd Week of November with 2 classes per week, will be asked to attend few extra classes during weekends in the month of November.

In case you are interested to register your ward for this course, please send the duly signed consent slip by Thursday7thSeptember 2017. For any further query you may contact Ms. Wadhwa, the Teacher Incharge(9425693062).

Dr.Dillip Panda   Sonia Wadhwa
(Head of Senior School)   (IT Manager)

Consent Slip for registration of Raspberry Pi and Python Programming Module

I _____parent of _____student of

class_____section _____and student id_____hereby give my consent to

register my ward for the Raspberry pi and Python programming module. I agree to pay the cost as

communicated by school (depending on the number of students enrolled) on or before 11th August 2017 by

sending cheque of the requisite amount in the n

ame of The Sanskaar Valley School, Bhopal.

(Signature of Parent)   (Signature of Student)

About the Course

Expected outcome

- o Advanced computing concepts and ability to control the machines.
- o Understanding of Basics of software development.
- o Hand on experience in developing different real-life projects varying in difficulty level
- o Solid grasp on Python programming language.
- o An opportunity for summer internship at Robodia and experience real working environment.
- o An opportunity to participate in international Olympiads in informatics.

Detailed Syllabus for the course module

Raspberry pi

- Introduction of Rpi
    1. About Rpi Anatomy
    2. First boot of Rpi
    3. How to operate Rpi from remote location
    4. Quizzes
- Physical Computing on Raspberry pi
    1. What is HAT?
    2. Play with LEDs, Switches and Buzzer on Raspberry pi
    3. How to interface sensors with raspberry pi
    4. Can Rpi Move?
    5. Quizzes
- Home Automation
    1. SVST School Tweeter weather station
    2. How to Inaugurate School Annual Function remotely
    3. Make smart school campus and control it by mobile app
    4. Make Automatic Table LAMP for saving Energy
    5. Quizzes Python
- Introduction
    1. Why is python so popular?
    2. Basic Block of Python
    3. Types, Operators, Expressions and Variables
    4. Quizzes
- Island of Knowledge
    1. String and Bindings and it's operation
    2. How to take input from user in python
    3. How to see output on console
    4. Quizzes
- Land of Logic
    1. if, else and elif
    2. For or while loop
    3. Quizzes
- Deeper Driving in python
    1. How to create Function and how to call it in python
    2. Global and Local variable
    3. Simple Algorithms
    4. Quizzes
- Meet Python Structure Market
    1. List, Tuples, Dictionaries and it's operation
    2. Comparison on different structure in python
    3. Quizzes

- Complexity of comprehensions
    1. What is OOPS?
    2. How to make class in python
    3. Makes complexity in algorithms using class
    4. Quizzes

Sonic -PI
- Introduction
- First WEEP
- Loop Tunnel
- Sleeping is important
- Ome Steve-Reich's piano phase
- Beat, AMP, Rate, Time
- Auto Melody drive
- Handy randomisation functions
- How to use pan, attack, note, decay sustain and its levels
- Make all together make fun project
- Mega Quizzes

Games
- Introduction
- PyGame and initial coding
- How to set-up Graphics
- Game logic using Block
- Debugging with black and white box
- Adding colours effects in our games
- Make all together make a Game
- Mega Quizzes