RAYAT BAHRA INTERNATIONAL SCHOOL

INTRODUCING

THE PLUS PROGRAMME

Why wait for university to learn from the best?

A monthly masterclass series with university professors, PHD scholars and industry experts

For Grades 9 to 12

Session Topics Booklet · 2026–2027

10 Sessions

10 Subjects

A WORD FROM THE SCHOOL

Why The Plus Programme Exists

At Rayat Bahra International School, we believe that the best education doesn't wait for university. It starts now — in the classroom, in conversation, and in contact with the people shaping the world.

RBIS sits on an extraordinary advantage that no other school in the region possesses: a living, breathing university ecosystem. The Rayat Bahra University campus is not just our neighbour — it is our most powerful teaching resource. Its faculty, its PhD scholars, its research labs, and its industry networks are all within reach of our students.

The Plus Programme was born from one simple question: *Why should our students wait until they are 18 to learn from the best?*

Every month, students in Grades 9–12 attend a 90-minute masterclass delivered by a University Professor, PhD Scholar, or Industry Expert. These are not lectures from a textbook — they are conversations with people who are actively researching, building, leading, and discovering. Sessions go far beyond the syllabus: from Artificial Intelligence and Geopolitics to Financial Literacy, Space Science, Ethics, and the Science of the Human Mind.

The goal is not to add more to learn — it is to teach students **how** to think, not just **what** to think. Every session is designed to spark curiosity, build confidence, and give students a head start — not just for university, but for life.

> *"Our children deserve more than just textbooks. RBIS is the only school in the region where students don't just read about the world — they hear about it from the people building it."*

How It Works

Every Month	90 Minutes	Grades 9–12
Held once every month	60-min lecture + 30-min Q&A	For Senior school students

TABLE OF CONTENTS

The Plus Programme · Rayat Bahra International School

April & May 2025 **From Idea to Income — How Student Startups Actually Work**	UPCOMING
June 2025 **Lead Like a Legend — Lessons from History's Greatest Minds**	UPCOMING
July 2025 **The Tiny Chip Running the World — The Semiconductor Story**	UPCOMING
August 2025 **The Machine That Learned to Think — AI, Power & Your Future**	UPCOMING
September 2025 **The Money Game — How the Financial World Really Works**	UPCOMING
October 2025 **What Kind of Person Do You Want to Be? — Ethics, Dilemmas & the Choices That Define You**	UPCOMING
November 2025 **Rewriting Life Itself — Science at the Edge of the Impossible**	UPCOMING
December 2025 **The Mind Under Pressure — Psychology, Stress & the Science of Resilience**	UPCOMING
January 2026 **Generation Fix-It — Young People Changing the World Right Now**	UPCOMING
February 2026 **Pale Blue Dot — Earth, Space & the Biggest Questions Ever Asked**	UPCOMING

APRIL & MAY 2025

ENTREPRENEURSHIP & INNOVATION

From Idea to Income

How Student Startups Actually Work

> *"Every billion-dollar company started as a crazy idea someone almost didn't pursue. What's stopping yours?"*

SESSION TALKING POINTS

1 **What Even Is a Startup?**
The difference between a business, a startup, and a side hustle — and why it matters which one you're building. Real examples from founders aged 14–22.

2 **Finding the Problem Worth Solving**
The biggest mistake young entrepreneurs make: building something nobody needs. How to spot real problems in your own life, community, and school.

3 **Idea to Prototype in 30 Days**
You don't need money to start — you need a Minimum Viable Product (MVP). How to test your idea cheaply and quickly before investing a single rupee.

4 **How Student Startups Get Funded**
Pitch competitions, school incubators, family rounds, and government schemes like Startup India. The money is out there — here's how to find it.

5 **Failure Is the Feature, Not the Bug**
98% of startups fail. The ones that win are the ones that failed faster and smarter. Real stories of student founders who pivoted from disaster to success.

6 **Build Your Pitch in 60 Seconds**
Investors decide in the first minute. Learn the elevator pitch formula that gets people to lean forward — and practise yours live.

JUNE 2025

LEADERSHIP & HISTORY

Lead Like a Legend

Lessons from History's Greatest Minds

> *"They had no Instagram, no Wi-Fi, no electricity — yet they changed the entire world. What did they know that most people never learn?"*

SESSION TALKING POINTS

1

What Leadership Actually Means

Leadership isn't a title — it's a choice. The difference between authority and influence, and why the greatest leaders often had neither power nor privilege to start.

2

Chandragupta Maurya — From Nobody to Emperor

Orphaned and unknown, he built India's first unified empire at 20. The strategic genius of Chanakya's most famous student and what his playbook looks like today.

3

Lincoln's Secret Weapon: Radical Empathy

He built a cabinet of rivals — people who hated him. Abraham Lincoln's counterintuitive approach to leadership and why it worked when everything else failed.

4

Mandela's 27-Year Masterclass in Patience

27 years in prison. Zero bitterness. How Nelson Mandela turned suffering into strategy and emerged as the moral leader of a generation.

5

APJ Abdul Kalam — The Scientist Who Inspired a Billion

A boy from Rameswaram with no connections, no money, and enormous dreams. What Kalam's life teaches about vision, humility, and national purpose.

6

Your Personal Leadership Philosophy

Every great leader had a north star — a guiding principle that held them steady under pressure. Students identify and articulate their own.

JULY 2025

TECHNOLOGY, GEOPOLITICS & ECONOMICS

The Tiny Chip Running the World

The Semiconductor Story

> *"A sliver of silicon smaller than your fingernail powers your phone, guides missiles, runs hospitals, and is now the most fought-over object on Earth. Whoever controls it, controls the future."*

SESSION TALKING POINTS

1 **What Even Is a Semiconductor — and Why Should You Care?**

From sand to silicon wafer to microchip — the astonishing science of how a grain of beach sand becomes the brain inside every device you own.

2 **Moore's Law: The Prediction That Built the Modern World**

In 1965, Gordon Moore predicted chips would double in power every two years. He was right for 50 years — and now we're hitting the physical limit of atoms. What happens next?

3 **The Chip War: America vs. China vs. Everyone Else**

Taiwan's TSMC manufactures chips so advanced that no other country on Earth can replicate them — yet. Why this tiny island has become the most strategically important piece of land in the 21st century.

4 **How a Chip Shortage Paralysed the Global Economy**

During COVID, car factories shut down — not because of steel or rubber shortages, but because they couldn't get chips the size of a fingernail. How something so small can break something so large.

5 **India's Semiconductor Mission — Can We Build Our Own?**

India has announced a $10 billion push to build its own chip manufacturing industry. What would it take? Who are the players? And why it could be the most important industrial bet India ever makes.

6 **Careers at the Frontier — Who Builds These Things?**

Materials scientists, electrical engineers, physicists, supply chain experts, geopolitical analysts — the semiconductor industry sits at the intersection of every major discipline. Where do students fit in?

AUGUST 2025

TECHNOLOGY & SOCIETY

The Machine That Learned to Think

AI, Power & Your Future

> *"AI is writing essays, diagnosing cancer, generating art, and taking jobs — all at the same time. The question isn't whether it will change your life. It already has."*

SESSION TALKING POINTS

1 **How AI Actually Works — Zero Jargon**

Neural networks, large language models, and machine learning explained using examples a 14-year-old can follow — and a PhD can appreciate.

2 **The Great Job Disruption**

Which careers are AI-proof? Which are already being automated? The honest data on what's changing, how fast, and what skills will matter in 2035.

3 **Who Owns the AI? The Power Problem**

Five American tech companies control most of the world's AI infrastructure. What does it mean when so much power sits with so few — and where is India in this race?

4 **When AI Gets It Wrong — Bias, Hallucinations & Harm**

Real cases of AI failure — and why the humans who build these systems matter enormously.

5 **AI in India — Opportunity or Risk?**

India has the engineers, the data, and the ambition. From AI-powered agriculture to healthcare in remote villages — the extraordinary possibilities for Indian AI.

6 **You Are Not Just a User — You Are a Shaper**

Students aren't just consumers of AI tools. They're the generation that will govern, regulate, and build them. What role do you want to play?

SEPTEMBER 2025

FINANCE & ECONOMICS

The Money Game

How the Financial World Really Works

> *"Nobody teaches you this in school. But the people who know these rules quietly build wealth while everyone else wonders why money is always tight."*

SESSION TALKING POINTS

1 **Why Your ₹100 Slowly Disappears (Even When You Don't Spend It)**
Imagine saving ₹100 today — but next year, it can only buy what ₹93 buys today. That's inflation. It's silent, it's constant, and it affects every rupee one owns. Here's how to spot it — and beat it.

2 **The Most Powerful Math Trick You'll Ever Learn: Compound Interest**
If you invested ₹1,000 a month starting at 16, you'd have over ₹1 crore by retirement — without doing anything extra. Start at 26? Less than half that. This one concept separates people who build wealth from people who wonder where their money went.

3 **How the Stock Market Actually Works**
Understanding shares, index funds, mutual funds, and SIPs. How ordinary people build extraordinary wealth — and the classic traps that wipe them out.

4 **Debt: Powerful Tool or Dangerous Trap?**
Good debt vs. bad debt. Learn to tell the difference between debt that builds your future and debt that quietly drains it — before you ever have to sign anything.

5 **Why Nations Stay Poor — The Economics of Inequality**
It's not laziness or bad culture. There are structural, systemic reasons why some countries remain trapped — and proven solutions that actually work.

6 **Your First Budget Starts Today — With Whatever You Have**
You don't need a salary to learn money management. Whether you get ₹50 or ₹5,000 a month, the habit of tracking, saving, and planning is a skill. Students who build it at 16 are miles ahead by 25.

OCTOBER 2025

PHILOSOPHY & CHARACTER

What Kind of Person Do You Want to Be?

Ethics, Dilemmas & the Choices That Define You

> *"Nobody wakes up one day and decides to become a bad person. It happens one small compromise at a time. Philosophy isn't about abstract theories — it's about the decisions you're already making, every single day."*

SESSION TALKING POINTS

1 **What Is Ethics — and Why It's Not Just "Being Nice"**
Ethics is the science of figuring out what's right when there's no easy answer. It's not about following rules — it's about reasoning through hard situations. And in a world where technology, social media, and peer pressure create new dilemmas every day, it's the most practical skill you can build.

2 **The Shortcut Everyone Takes**
Your entire class uses an AI tool to write their essays — the teacher doesn't know, nobody gets caught, and the marks are great. Is it cheating if everyone does it? Is a rule still a rule if it's never enforced? A dilemma students are literally living right now.

3 **Would You Cheat If Nobody Was Watching?**
Research shows most people bend rules when they think they won't get caught. Why? And what does that say about whether our morality is genuine — or just fear of consequences? A surprisingly honest conversation about integrity, identity, and who you are when no one's looking.

4 **Online vs. Offline You — Are They the Same Person?**
People say things online they'd never say face to face. They post highlights, hide struggles, and perform versions of themselves. Is that dishonesty — or just human? Exploring authenticity, digital identity, and the ethics of the self you present to the world.

5 **Standing Up vs. Fitting In — The Hardest Choice in Any Classroom**
Bystander effect, groupthink, social conformity — science explains why good people stay silent when they should speak. Understanding the psychology makes it easier to override it. Real cases where one person speaking up changed everything.

6 **What Legacy Do You Want to Leave? — Designing Your Moral Compass**
Every major leader, innovator, and changemaker had a set of non-negotiable values they lived by. Students articulate theirs — not vague ideals, but specific principles they can actually test their decisions against when things get hard.

NOVEMBER 2025

SCIENCE & ETHICS

Rewriting Life Itself

Science at the Edge of the Impossible

> *"The hardest scientific question isn't 'Can we?' — it's 'Should we?' And that question has never been more urgent than right now."*

SESSION TALKING POINTS

1

CRISPR: The Find-and-Replace for DNA

Jennifer Doudna won the Nobel Prize for discovering how to edit genes like editing a document. What diseases could be cured — and what could go catastrophically wrong?

2

The Brain-Computer Interface

Neuralink is real. Paralysed people are moving cursors with their thoughts. Where does 'human' end and 'machine' begin — and who gets to decide?

3

Synthetic Biology: Writing New Life Forms

Scientists are building organisms that have never existed on Earth — living medicines, biodegradable plastics, even reviving extinct species. Are we ready for what we're creating?

4

Vaccines: The Greatest Invention You Take for Granted

Smallpox killed 300 million people. It no longer exists. How did a simple injection eliminate an ancient killer — and why are the same principles now being used to fight cancer? The jaw-dropping science behind the shots most of us got as children.

5

3D-Printed Organs — The Waiting List That Doesn't Have to Exist

Every 10 minutes, someone is added to an organ transplant waiting list. Scientists are now printing human kidneys, ears, and skin using living cells like ink. What happens to medicine — and to humanity — when we can simply print the parts we need?

6

The Careers Nobody Told You About — Science's Most Exciting Frontiers

Neurotech engineer. Synthetic biologist. Space medicine doctor. Bioinformatics researcher. The most exciting science careers of the next 30 years barely exist yet — and the students in this room are exactly the right age to build them.

DECEMBER 2025

PSYCHOLOGY & WELLBEING

The Mind Under Pressure

Psychology, Stress & the Science of Resilience

> *"Your brain isn't broken. It's doing exactly what it was designed to do — in a world it was never designed for."*

SESSION TALKING POINTS

1. **The Stress Response — Your Brain on Fire**
   Fight, flight, freeze — what's actually happening in your body when anxiety hits. The neuroscience of stress explained simply, without judgment.

2. **Why Smart People Make Terrible Decisions Under Pressure**
   Cognitive distortions, confirmation bias, decision fatigue. How the brain shortcuts under stress — and how top performers train themselves around it.

3. **Gen Z & the Anxiety Epidemic — What the Data Says**
   Gen Z is the most anxious, most depressed, and most therapy-aware generation ever measured. Is it phones? Pressure? The economy? Probably all three.

4. **The Sleep–Performance Connection**
   Your brain literally cleans itself while you sleep. Missing just 90 minutes reduces cognitive performance by 30%. Why sleep is the highest-leverage habit you have.

5. **Resilience Is a Skill, Not a Trait**
   Some people bounce back from setbacks faster — and it's not luck or personality. The proven psychological frameworks that build real mental toughness.

6. **Two-Minute Tools That Actually Work**
   Breathwork, grounding techniques, cognitive reframing. Evidence-based micro-interventions students can use before exams, presentations, or any high-pressure moment.

JANUARY 2026

SOCIAL ISSUES & YOUTH ACTIVISM

Generation Fix-It

Young People Changing the World Right Now

> *"Every movement that changed the world was started by someone who was told they were too young, too small, or too late."*

SESSION TALKING POINTS

1 **The History of Youth-Led Change**

From anti-apartheid student movements to Malala's campaign for girls' education — what do successful young changemakers consistently do differently from everyone else?

2 **India's Young Activists — Stories You Should Know**

Young Indians fighting for caste equality, clean air in Delhi, mental health awareness, and girls' access to sport. Homegrown changemakers who started with nothing but conviction.

3 **Social Media: Amplifier or Trap for Activism?**

Hashtag movements that changed laws vs. hashtag movements that changed nothing. The crucial difference between performative activism and the kind that actually works.

4 **The Problem With 'Saving' People**

Well-meaning interventions that made things worse. Why listening, local knowledge, and community ownership are essential in solving real social problems.

5 **Designing an Intervention That Works**

Every effective social change project starts with a clear problem definition, not a solution. The human-centred design process applied to social issues.

6 **From Passion to Plan**

Students identify one issue they genuinely care about and map a realistic 90-day action plan — with real dates, names, and concrete next steps.

FEBRUARY 2026

SPACE, PHILOSOPHY & EXISTENTIAL WONDER

Pale Blue Dot

Earth, Space & the Biggest Questions Ever Asked

> *"Carl Sagan looked at a photo of Earth from 6 billion kilometres away and said: 'That's here. That's home. That's us.' Space doesn't make you feel small — it makes everything else feel possible."*

SESSION TALKING POINTS

1 **The Universe Is Older and Stranger Than You Think**

13.8 billion years. 2 trillion galaxies. Time dilation, dark matter, quantum entanglement. A tour of what we know — and the vast, thrilling expanse of what we don't.

2 **India's Space Story — From a Bicycle to the Moon's South Pole**

ISRO launched its first rocket on a bicycle. Chandrayaan-3 landed where no mission had ever landed. How India became a space power on a fraction of NASA's budget.

3 **Could Life Exist Elsewhere?**

Europa has a liquid ocean. Mars once had rivers. Titan has methane lakes. The growing scientific case for life beyond Earth — and what finding it would mean for everything.

4 **The Black Hole at the Centre of Our Galaxy**

In 2022, scientists photographed Sagittarius A* — the supermassive black hole 26,000 light years away at the heart of the Milky Way. What it tells us about space and time.

5 **Why Becoming Multi-Planetary Might Save Us**

Asteroid impacts wiped out the dinosaurs. Climate change is reshaping Earth. Is space humanity's insurance policy — or just the escape hatch for the privileged?

6 **The Overview Effect — What Astronauts See That Changes Everything**

Every astronaut who has seen Earth from space describes the same transformation: no borders, no divisions, just a fragile blue marble. What if everyone could see what they see?

The Plus Standard

The Plus Programme is not defined by its topics. It is defined by the standard it refuses to drop.

01

Substance Over Spectacle

Every session is chosen because it matters — not because it is trending. Topics are selected for their intellectual depth, real-world relevance, and lasting impact on how students see and engage with the world.

02

Experts, Not Just Educators

Every session is delivered by someone actively working at the frontier of their field — a researcher mid-discovery, a professional mid-career, or a scholar mid-thesis. The standard is not who can teach the topic. It is who lives it.

03

Beyond the Syllabus, Always

No session will ever teach what a textbook already covers. The Plus Programme exists precisely in the space that formal education does not reach — the questions boards do not ask, the contexts curricula do not provide, and the thinking no exam can assess.

04

Conversation, Not Lecture

The 30-minute Q&A is not an afterthought — it is half the point. Every session is designed to end with the room talking. A session where no one asks a question has not met the Plus standard, regardless of how good the delivery was.

05

Open-Ended & Aspirational

This Is Year One Every institution that lasts begins somewhere. The Plus Programme begins here — with ten sessions, one academic year, and the conviction that students deserve more than what a syllabus can offer. What it becomes next is still being written..

“Why wait for university to learn from the best?”

Rayat Bahra International School · The Plus Programme · 2026–2027