AMAR CHITRA KATHA

TINKLE

IIT Hyderabad

Where Innovation Meets Excellence

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IIT Hyderabad



THE STORY OF IIT HYDERABAD

Where Innovation meets Excellence

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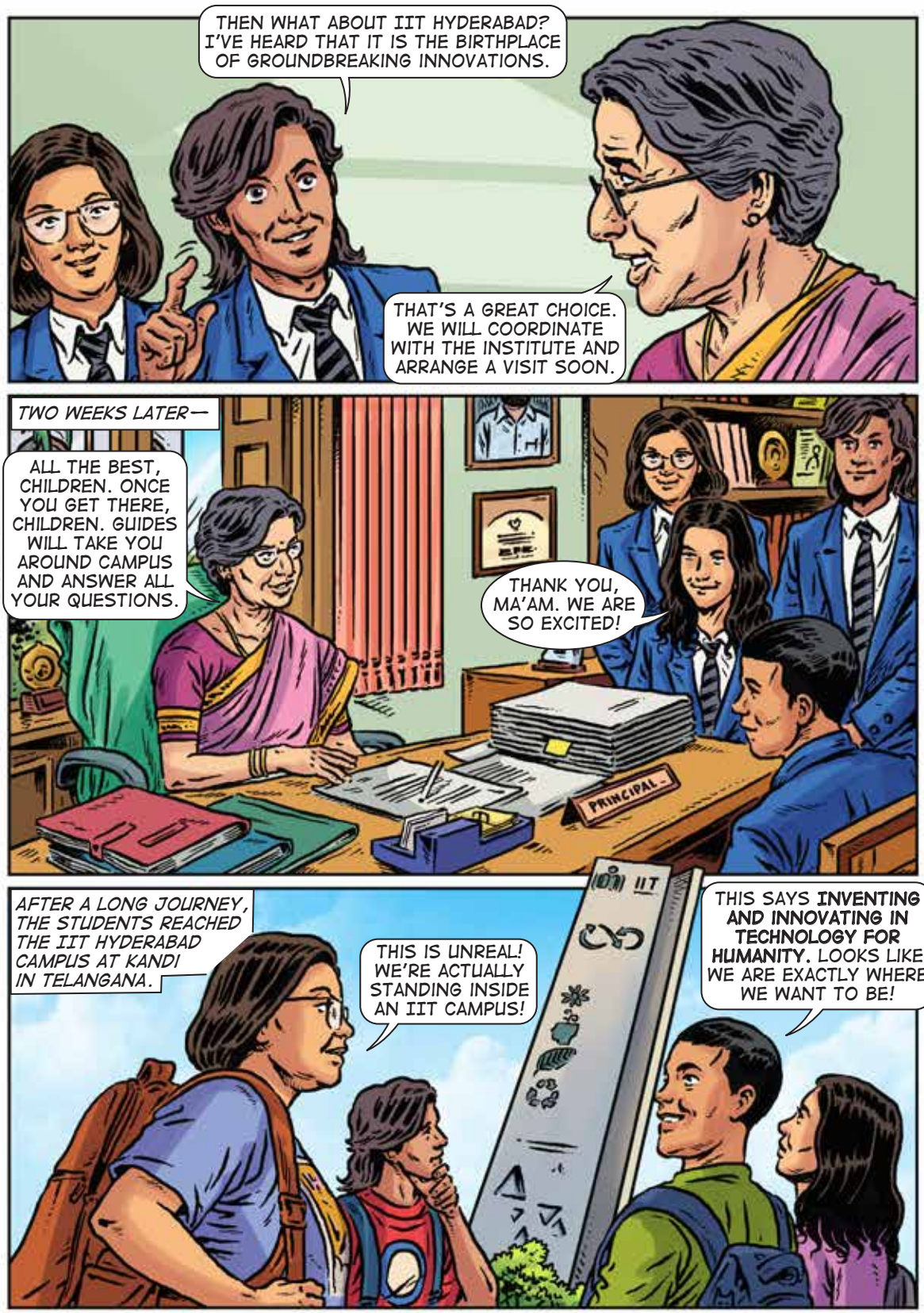
Special thanks to the Indian Institute of Technology, Hyderabad

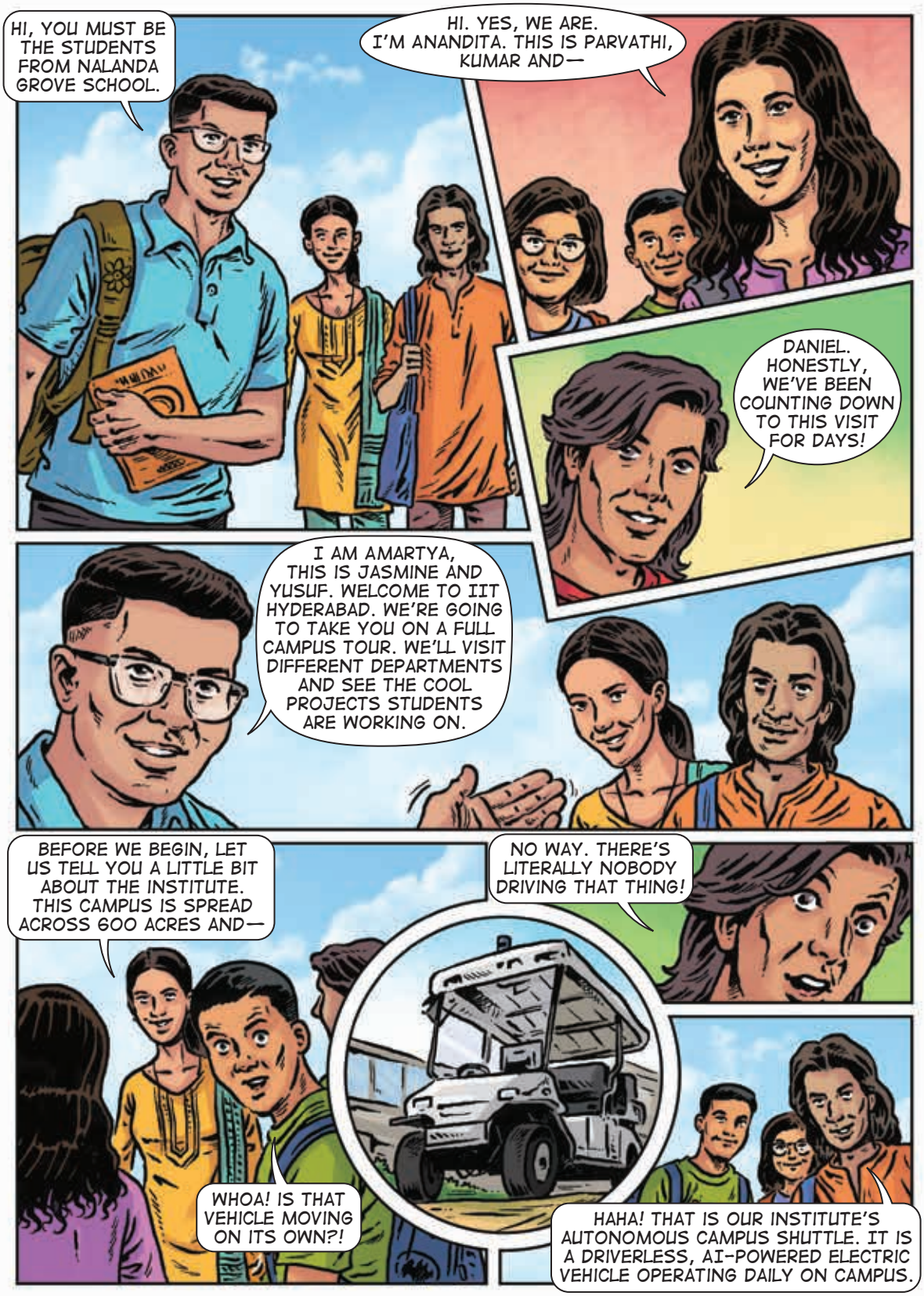
ISBN: 978-93-6127-212-7

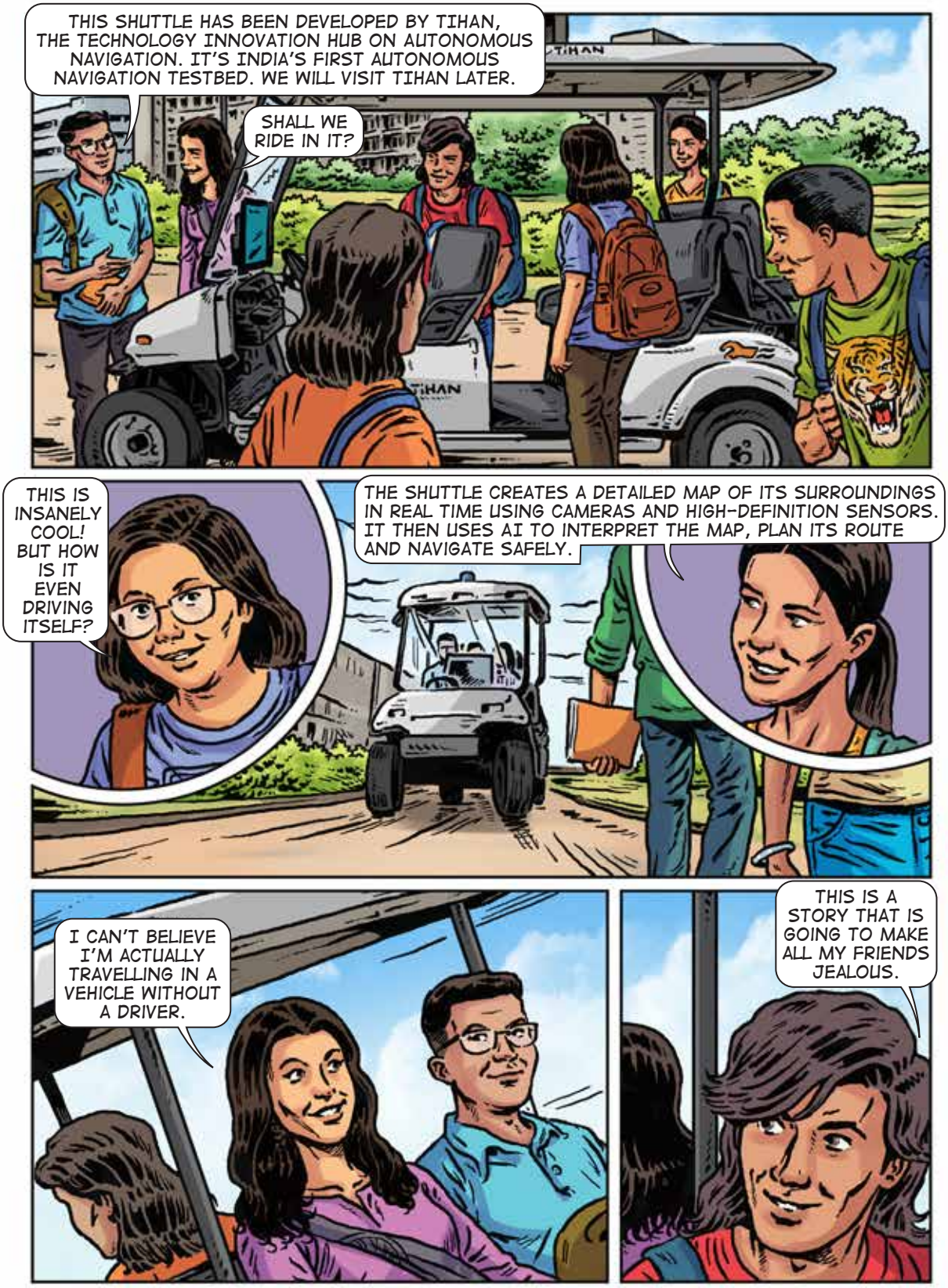
Published by Amar Chitra Katha Pvt. Ltd., November 2026

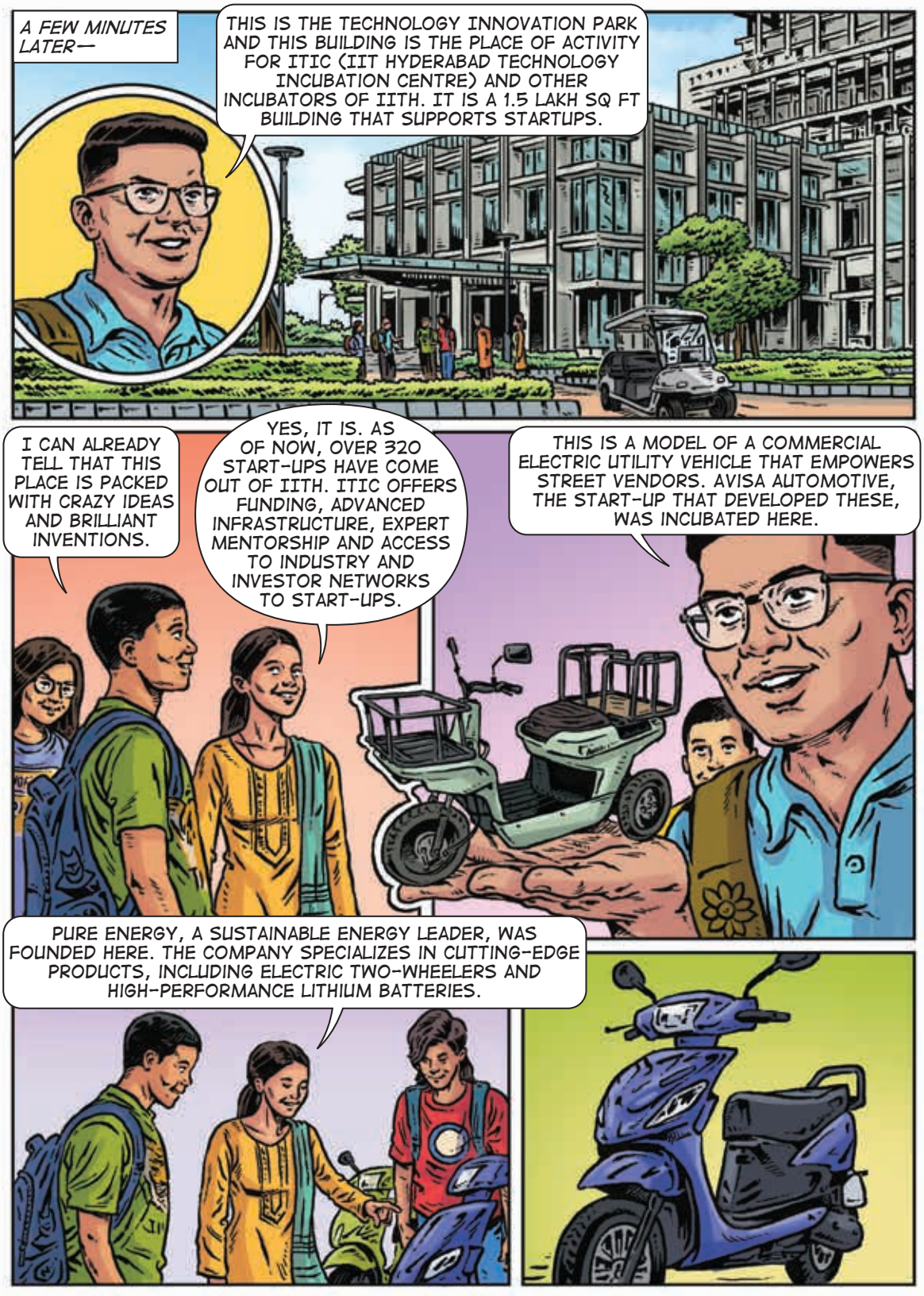
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STUDENTS FROM OVER 20 SCHOOLS WAITED WITH BATED BREATH—
AND THE FIRST PRIZE FOR THE INTER-SCHOOL HIGHER SECONDARY INNOVATION CHALLENGE GOES TO THE STUDENTS FROM NALANDA GROVE SENIOR SCHOOL FOR THEIR SOLAR-POWERED PHONE CHARGING CASE.
INTER SCHOOL COMPETITION
Higher Secondary Innovation Challenge
CONGRATULATIONS TO PARVATHI, ANANDITA, KUMAR AND DANIEL FOR THIS INVENTION! WE HOPE THEY CONTINUE TO CREATE INNOVATIONS THAT CHANGE THE WORLD FOR THE BETTER.
BACK AT SCHOOL—
CONGRATULATIONS, STUDENTS! WE ARE VERY PROUD OF YOU. AS A SPECIAL REWARD, WE WOULD LIKE TO TAKE YOU ON A TRIP TO A PLACE OF YOUR CHOICE.
LOVE THE AMBITION, DANIEL! BUT HOW ABOUT SOMETHING CLOSER TO HOME?
OH, I WOULD LOVE TO VISIT THE MOON! IMAGINE CHECKING OUT ACTUAL CRATERS UP CLOSE!
MA'AM, I WOULD LOVE TO VISIT A PLACE WHERE WE CAN SEE HOW IDEAS ARE TRANSLATED INTO REAL-WORLD SOLUTIONS.

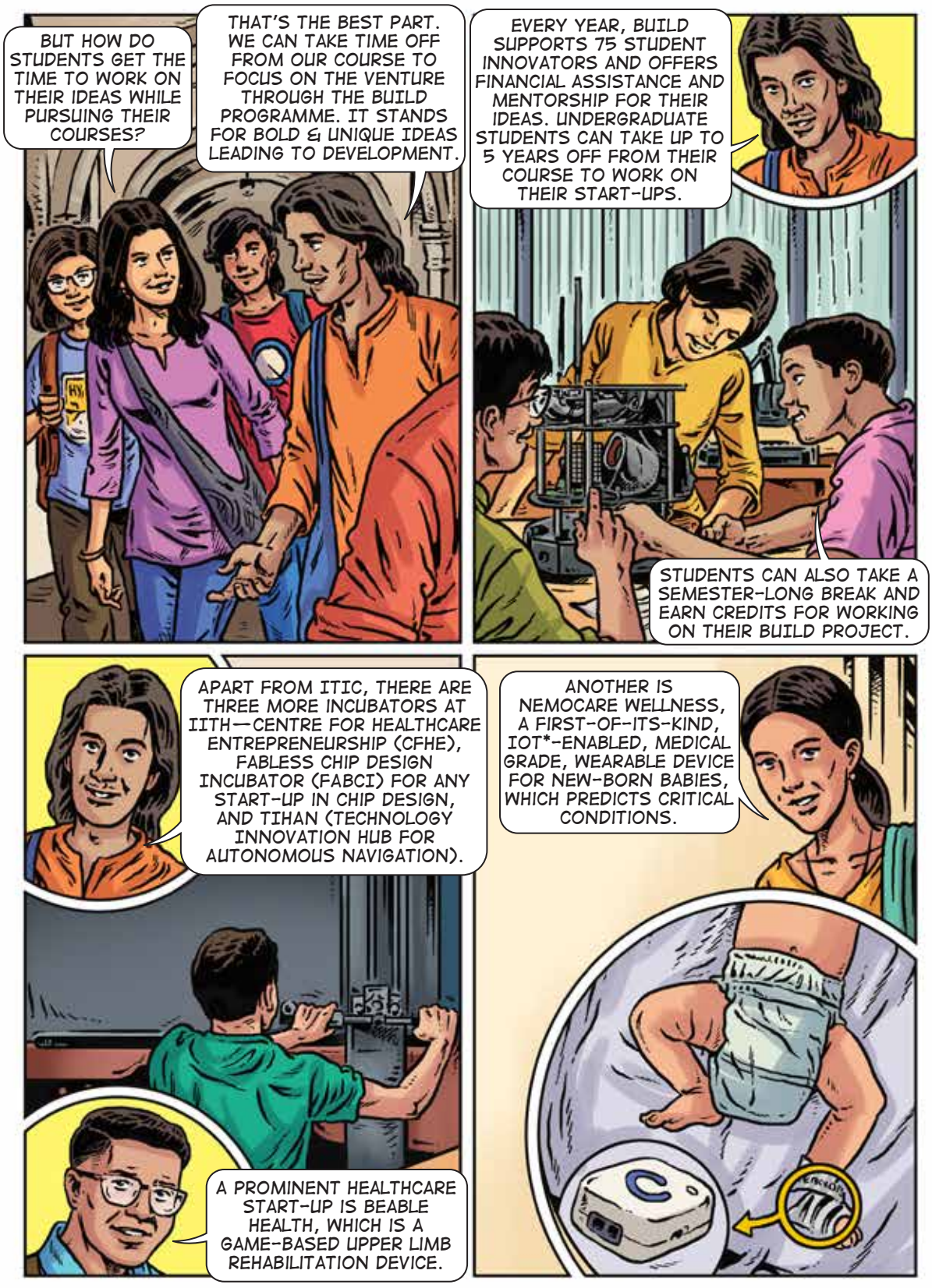

THEN WHAT ABOUT IIT HYDERABAD? I'VE HEARD THAT IT IS THE BIRTHPLACE OF GROUNDBREAKING INNOVATIONS.
THAT'S A GREAT CHOICE. WE WILL COORDINATE WITH THE INSTITUTE AND ARRANGE A VISIT SOON.
TWO WEEKS LATER—
ALL THE BEST, CHILDREN. ONCE YOU GET THERE, CHILDREN. GUIDES WILL TAKE YOU AROUND CAMPUS AND ANSWER ALL YOUR QUESTIONS.
THANK YOU, MA'AM. WE ARE SO EXCITED!
PRINCIPAL
AFTER A LONG JOURNEY, THE STUDENTS REACHED THE IIT HYDERABAD CAMPUS AT KANDI IN TELANGANA.
THIS IS UNREAL! WE'RE ACTUALLY STANDING INSIDE AN IIT CAMPUS!
IIT
THIS SAYS **INVENTING AND INNOVATING IN TECHNOLOGY FOR HUMANITY.** LOOKS LIKE WE ARE EXACTLY WHERE WE WANT TO BE!


HI, YOU MUST BE THE STUDENTS FROM NALANDA GROVE SCHOOL.
HI. YES, WE ARE. I'M ANANDITA. THIS IS PARVATHI, KUMAR AND—
DANIEL. HONESTLY, WE'VE BEEN COUNTING DOWN TO THIS VISIT FOR DAYS!
I AM AMARTYA, THIS IS JASMINE AND YUSUF. WELCOME TO IIT HYDERABAD. WE'RE GOING TO TAKE YOU ON A FULL CAMPUS TOUR. WE'LL VISIT DIFFERENT DEPARTMENTS AND SEE THE COOL PROJECTS STUDENTS ARE WORKING ON.
BEFORE WE BEGIN, LET US TELL YOU A LITTLE BIT ABOUT THE INSTITUTE. THIS CAMPUS IS SPREAD ACROSS 600 ACRES AND—
NO WAY. THERE'S LITERALLY NOBODY DRIVING THAT THING!
WHOA! IS THAT VEHICLE MOVING ON ITS OWN?!
HAHA! THAT IS OUR INSTITUTE'S AUTONOMOUS CAMPUS SHUTTLE. IT IS A DRIVERLESS, AI-POWERED ELECTRIC VEHICLE OPERATING DAILY ON CAMPUS.

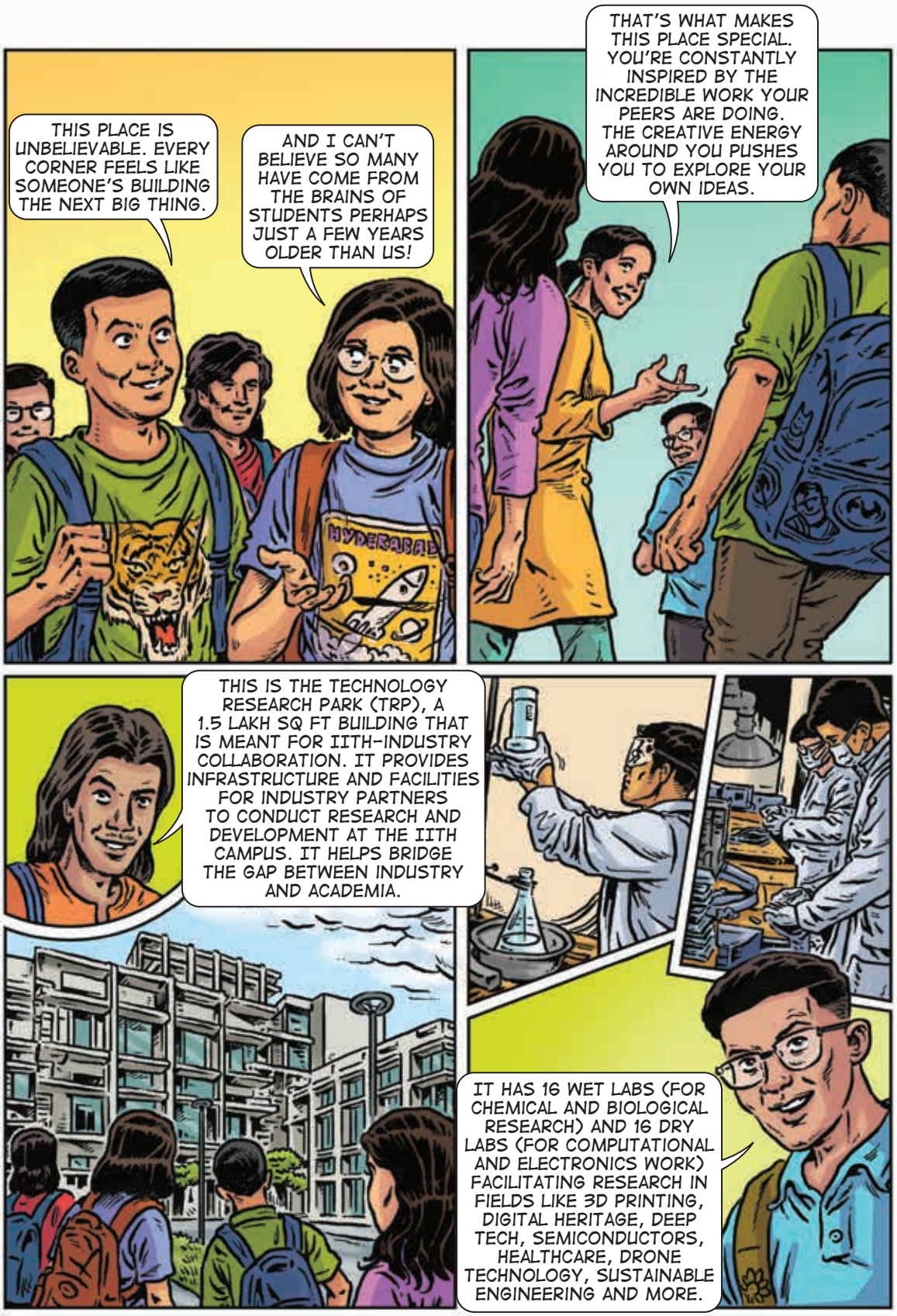

THIS SHUTTLE HAS BEEN DEVELOPED BY TIHAN, THE TECHNOLOGY INNOVATION HUB ON AUTONOMOUS NAVIGATION. IT'S INDIA'S FIRST AUTONOMOUS NAVIGATION TESTBED. WE WILL VISIT TIHAN LATER.
SHALL WE RIDE IN IT?
TIHAN
THIS IS INSANELY COOL! BUT HOW IS IT EVEN DRIVING ITSELF?
THE SHUTTLE CREATES A DETAILED MAP OF ITS SURROUNDINGS IN REAL TIME USING CAMERAS AND HIGH-DEFINITION SENSORS. IT THEN USES AI TO INTERPRET THE MAP, PLAN ITS ROUTE AND NAVIGATE SAFELY.
I CAN'T BELIEVE I'M ACTUALLY TRAVELLING IN A VEHICLE WITHOUT A DRIVER.
THIS IS A STORY THAT IS GOING TO MAKE ALL MY FRIENDS JEALOUS.

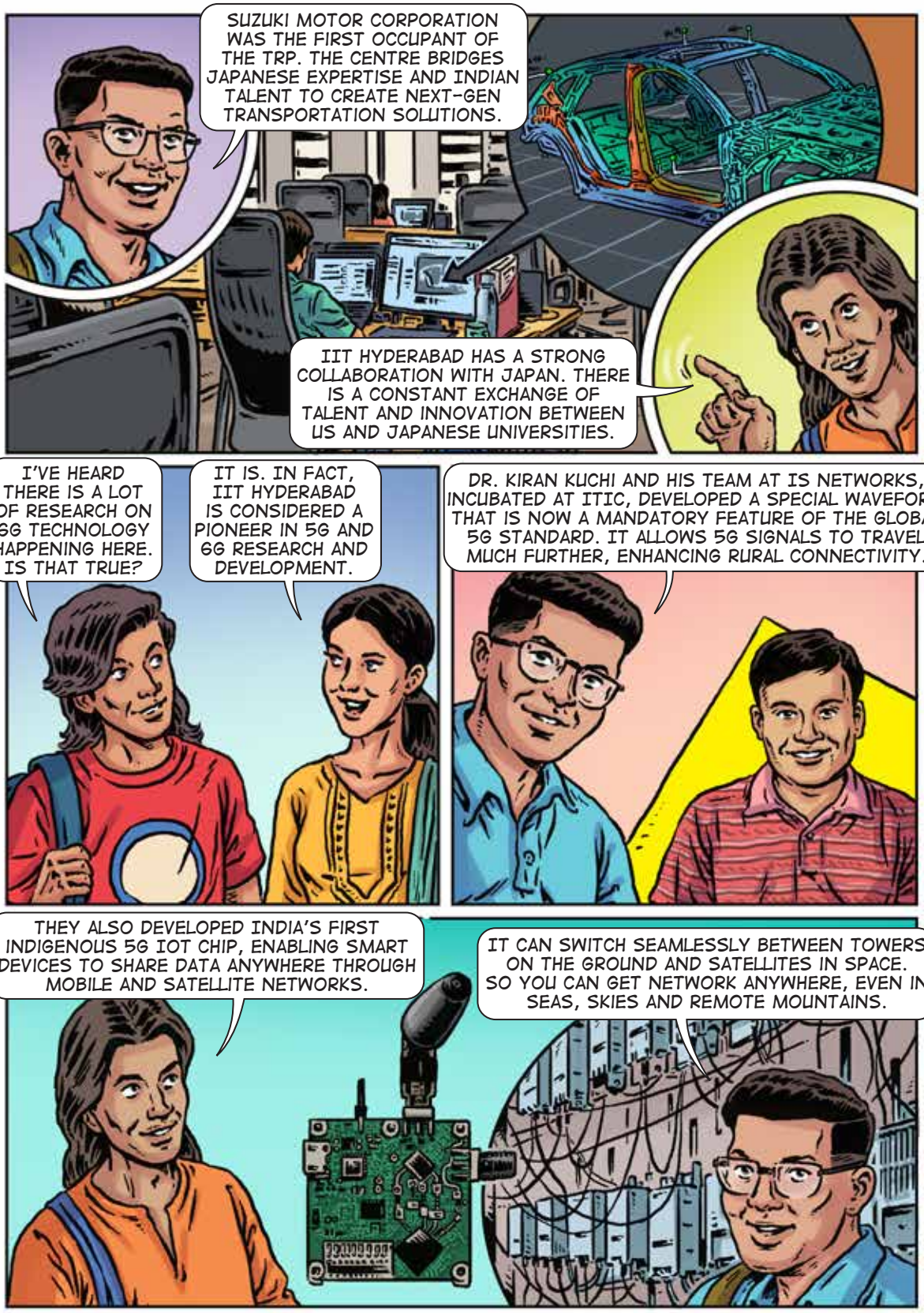

A FEW MINUTES LATER—
THIS IS THE TECHNOLOGY INNOVATION PARK AND THIS BUILDING IS THE PLACE OF ACTIVITY FOR ITIC (IIT HYDERABAD TECHNOLOGY INCUBATION CENTRE) AND OTHER INCUBATORS OF IITH. IT IS A 1.5 LAKH SQ FT BUILDING THAT SUPPORTS STARTUPS.
I CAN ALREADY TELL THAT THIS PLACE IS PACKED WITH CRAZY IDEAS AND BRILLIANT INVENTIONS.
YES, IT IS. AS OF NOW, OVER 320 START-UPS HAVE COME OUT OF IITH. ITIC OFFERS FUNDING, ADVANCED INFRASTRUCTURE, EXPERT MENTORSHIP AND ACCESS TO INDUSTRY AND INVESTOR NETWORKS TO START-UPS.
THIS IS A MODEL OF A COMMERCIAL ELECTRIC UTILITY VEHICLE THAT EMPOWERS STREET VENDORS. AVISA AUTOMOTIVE, THE START-UP THAT DEVELOPED THESE, WAS INCUBATED HERE.
PURE ENERGY, A SUSTAINABLE ENERGY LEADER, WAS FOUNDED HERE. THE COMPANY SPECIALIZES IN CUTTING-EDGE PRODUCTS, INCLUDING ELECTRIC TWO-WHEELERS AND HIGH-PERFORMANCE LITHIUM BATTERIES.

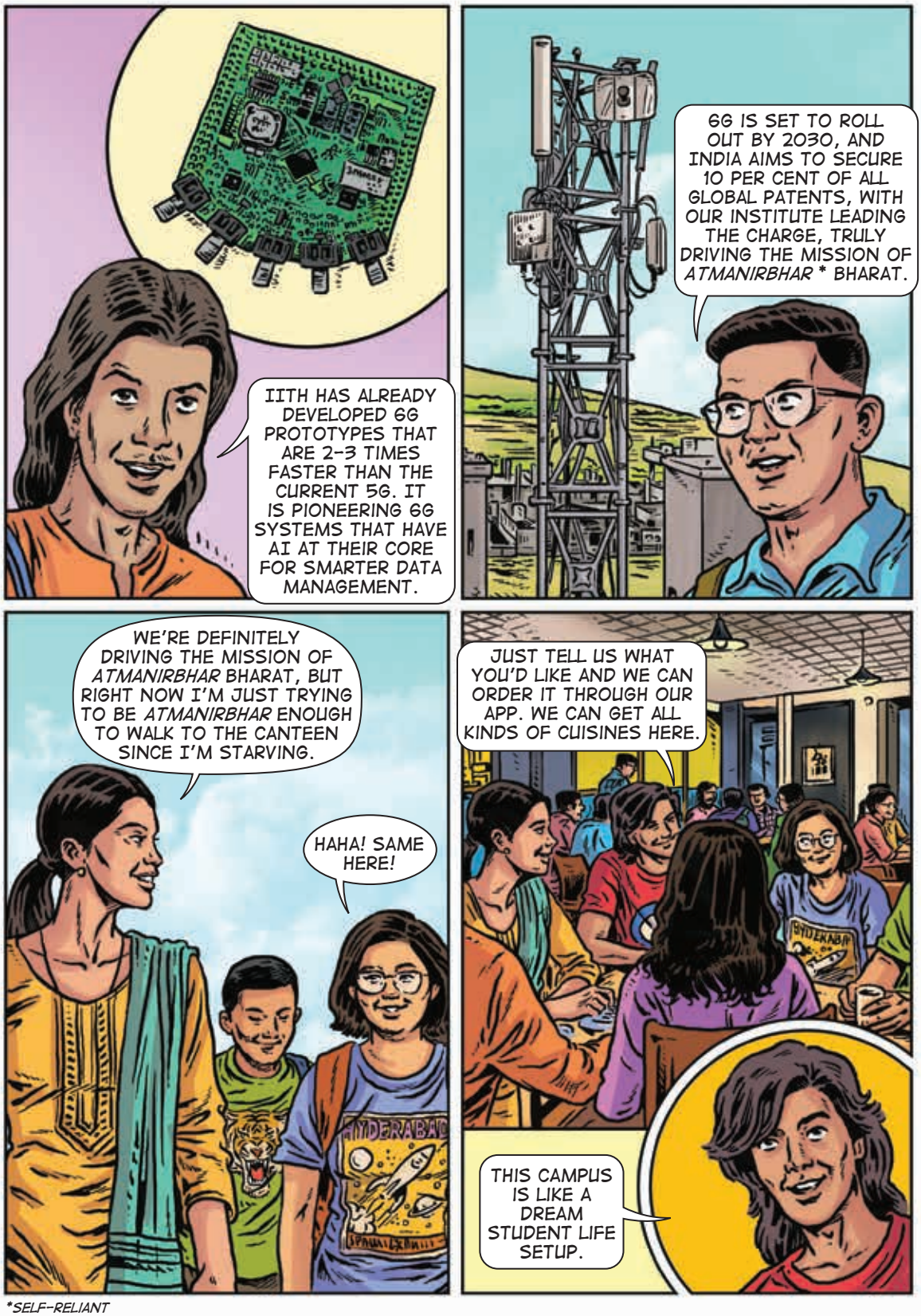

ANOTHER START-UP WORKING ON SUSTAINABLE ENERGY IS PAVAKAH ENERGY. THEY ARE DEVELOPING A NANOTECHNOLOGY-BASED FILM CAPABLE OF CONVERTING ANY SURFACE INTO A SOLAR PANEL WHILE REFLECTING UV AND IR RAYS TO ENHANCE ENERGY EFFICIENCY.
IMAGINE STUDYING HERE AND BUILDING SOLUTIONS THAT ACTUALLY HELP THE PLANET.
WHAT'S THIS?
THIS IS A WEARABLE DEVICE WHICH CONVERTS SIGN LANGUAGE INTO SPEECH IN REAL TIME, DEVELOPED BY A START-UP CALLED DITU TECH.
WHOA! ARE ALL THESE START-UPS BY STUDENTS WHO ARE STUDYING HERE?
MANY ARE BY OUR STUDENTS, SOME ARE BY PROFESSORS AND SOME ARE OUTSIDE START-UPS THAT ARE INCUBATED HERE.
WAIT, IS THAT A STUDENT BUILDING A START-UP RIGHT NOW?
IT LOOKS LIKE SHE IS DISCUSSING HER PROJECT WITH A MENTOR.
INNOVATION & INCUBATION



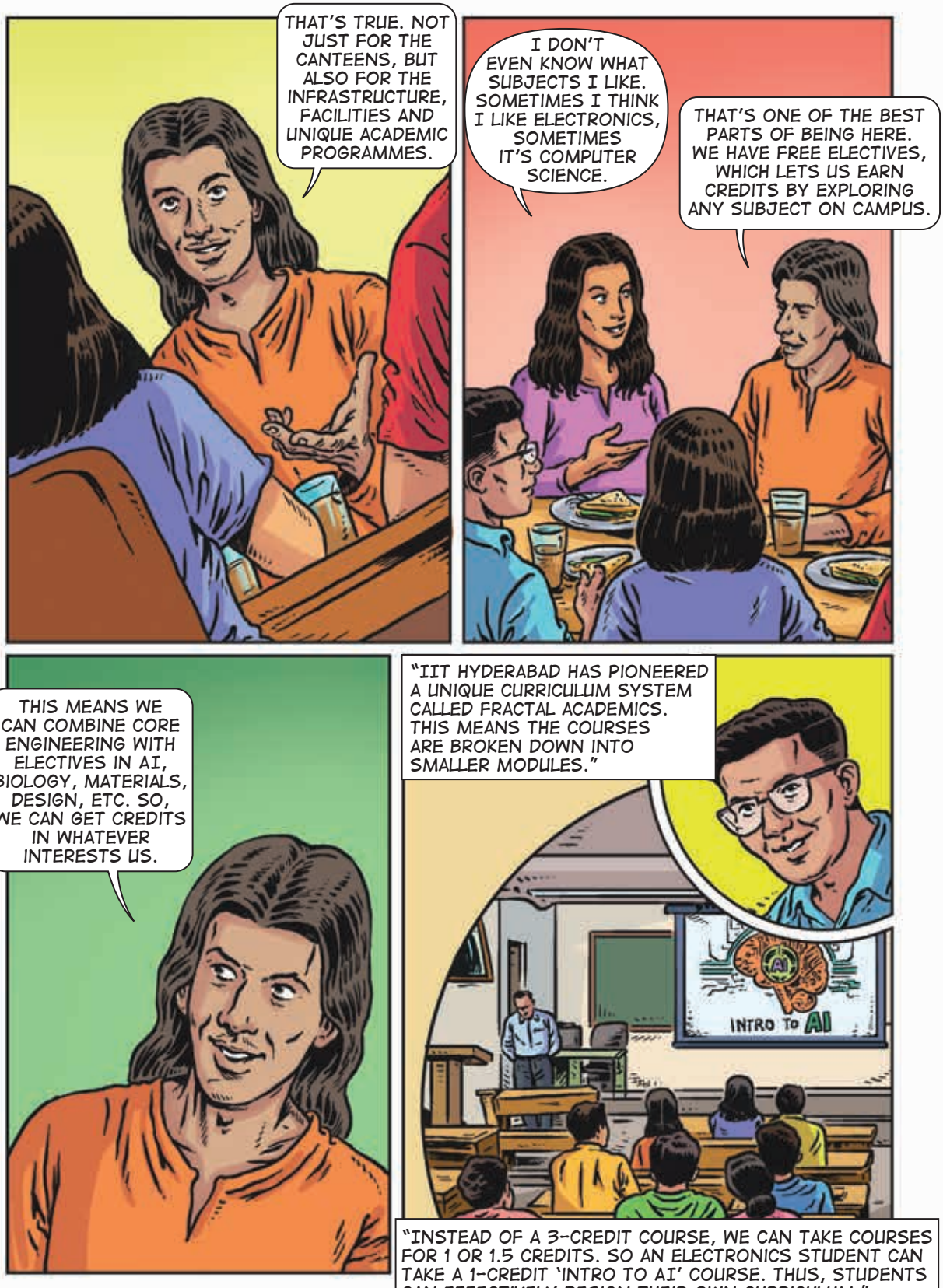
*INTERNET OF THINGS. IT IS A NETWORK OF PHYSICAL OBJECTS EMBEDDED WITH SENSORS AND TECHNOLOGIES THAT CONNECT AND EXCHANGE DATA WITH OTHER DEVICES OVER THE INTERNET.


THIS PLACE IS UNBELIEVABLE. EVERY CORNER FEELS LIKE SOMEONE'S BUILDING THE NEXT BIG THING.
AND I CAN'T BELIEVE SO MANY HAVE COME FROM THE BRAINS OF STUDENTS PERHAPS JUST A FEW YEARS OLDER THAN US!
HYDERABAD
THAT'S WHAT MAKES THIS PLACE SPECIAL. YOU'RE CONSTANTLY INSPIRED BY THE INCREDIBLE WORK YOUR PEERS ARE DOING. THE CREATIVE ENERGY AROUND YOU PUSHES YOU TO EXPLORE YOUR OWN IDEAS.
THIS IS THE TECHNOLOGY RESEARCH PARK (TRP), A 1.5 LAKH SQ FT BUILDING THAT IS MEANT FOR IITH-INDUSTRY COLLABORATION. IT PROVIDES INFRASTRUCTURE AND FACILITIES FOR INDUSTRY PARTNERS TO CONDUCT RESEARCH AND DEVELOPMENT AT THE IITH CAMPUS. IT HELPS BRIDGE THE GAP BETWEEN INDUSTRY AND ACADEMIA.
IT HAS 16 WET LABS (FOR CHEMICAL AND BIOLOGICAL RESEARCH) AND 16 DRY LABS (FOR COMPUTATIONAL AND ELECTRONICS WORK) FACILITATING RESEARCH IN FIELDS LIKE 3D PRINTING, DIGITAL HERITAGE, DEEP TECH, SEMICONDUCTORS, HEALTHCARE, DRONE TECHNOLOGY, SUSTAINABLE ENGINEERING AND MORE.


SUZUKI MOTOR CORPORATION WAS THE FIRST OCCUPANT OF THE TRP. THE CENTRE BRIDGES JAPANESE EXPERTISE AND INDIAN TALENT TO CREATE NEXT-GEN TRANSPORTATION SOLUTIONS.
IIT HYDERABAD HAS A STRONG COLLABORATION WITH JAPAN. THERE IS A CONSTANT EXCHANGE OF TALENT AND INNOVATION BETWEEN US AND JAPANESE UNIVERSITIES.
I'VE HEARD THERE IS A LOT OF RESEARCH ON 6G TECHNOLOGY HAPPENING HERE. IS THAT TRUE?
IT IS. IN FACT, IIT HYDERABAD IS CONSIDERED A PIONEER IN 5G AND 6G RESEARCH AND DEVELOPMENT.
DR. KIRAN KUCHI AND HIS TEAM AT IS NETWORKS, INCUBATED AT ITIC, DEVELOPED A SPECIAL WAVEFORM THAT IS NOW A MANDATORY FEATURE OF THE GLOBAL 5G STANDARD. IT ALLOWS 5G SIGNALS TO TRAVEL MUCH FURTHER, ENHANCING RURAL CONNECTIVITY.
THEY ALSO DEVELOPED INDIA'S FIRST INDIGENOUS 5G IOT CHIP, ENABLING SMART DEVICES TO SHARE DATA ANYWHERE THROUGH MOBILE AND SATELLITE NETWORKS.
IT CAN SWITCH SEAMLESSLY BETWEEN TOWERS ON THE GROUND AND SATELLITES IN SPACE. SO YOU CAN GET NETWORK ANYWHERE, EVEN IN SEAS, SKIES AND REMOTE MOUNTAINS.

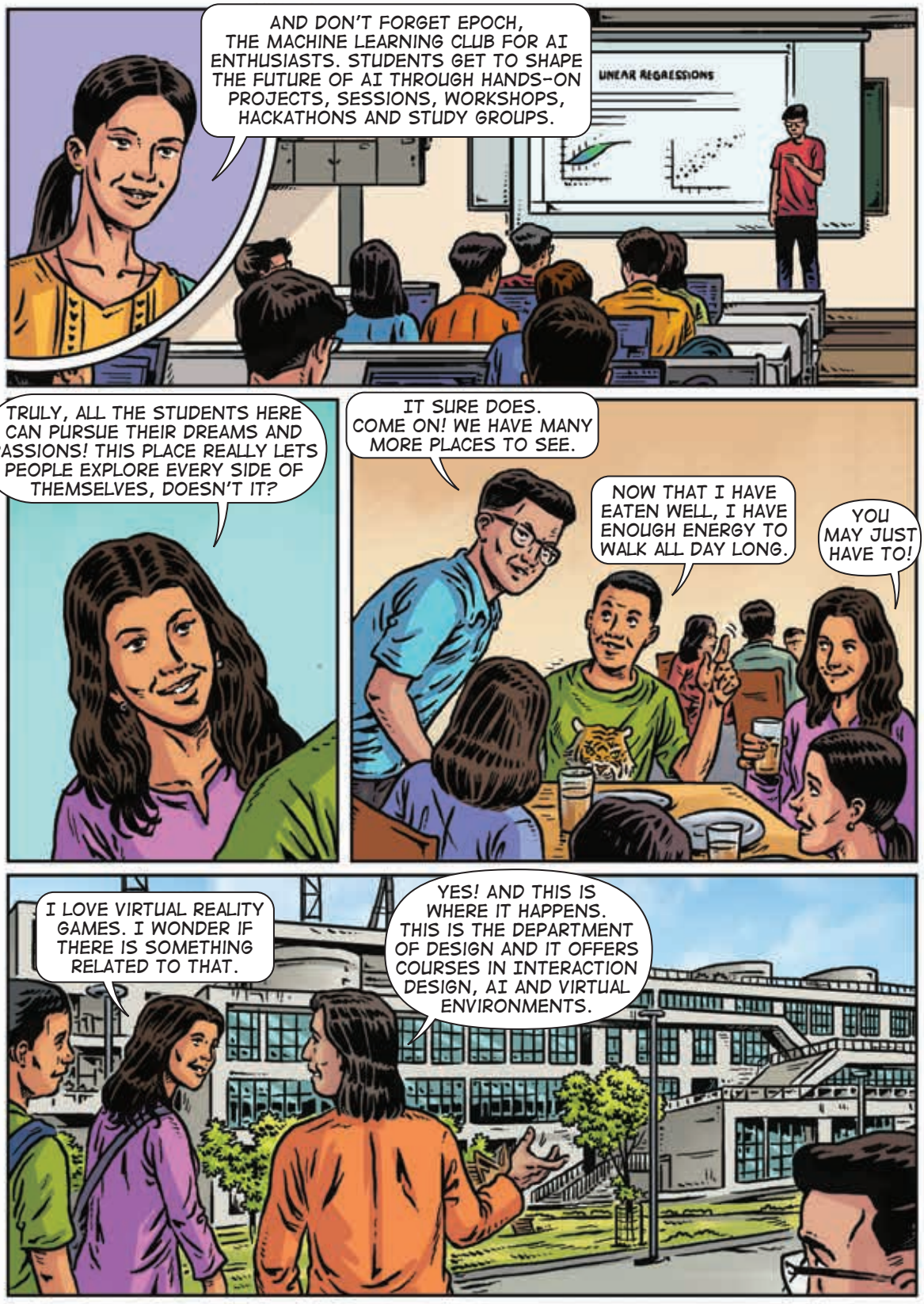


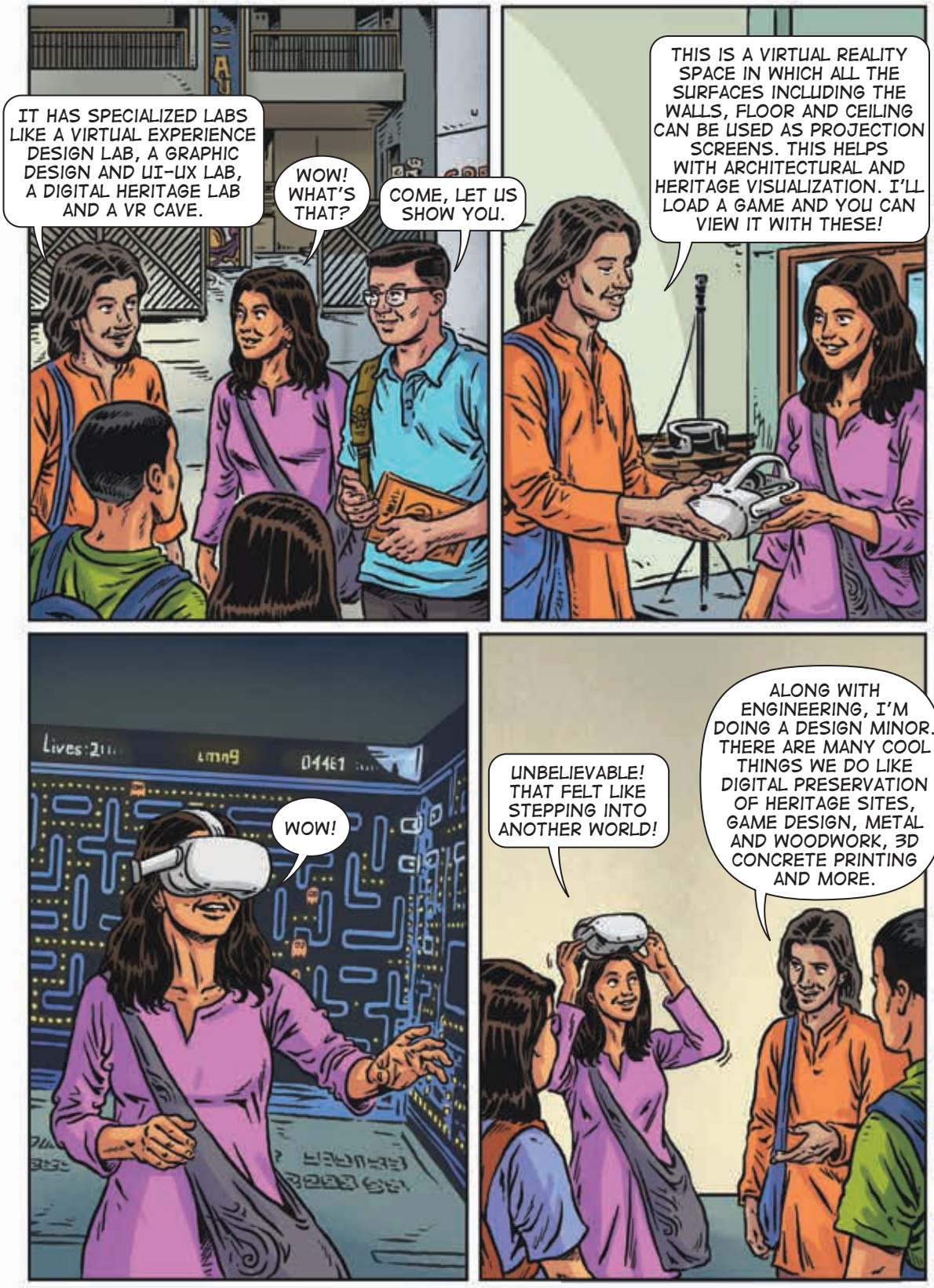
*SELF-RELIANT

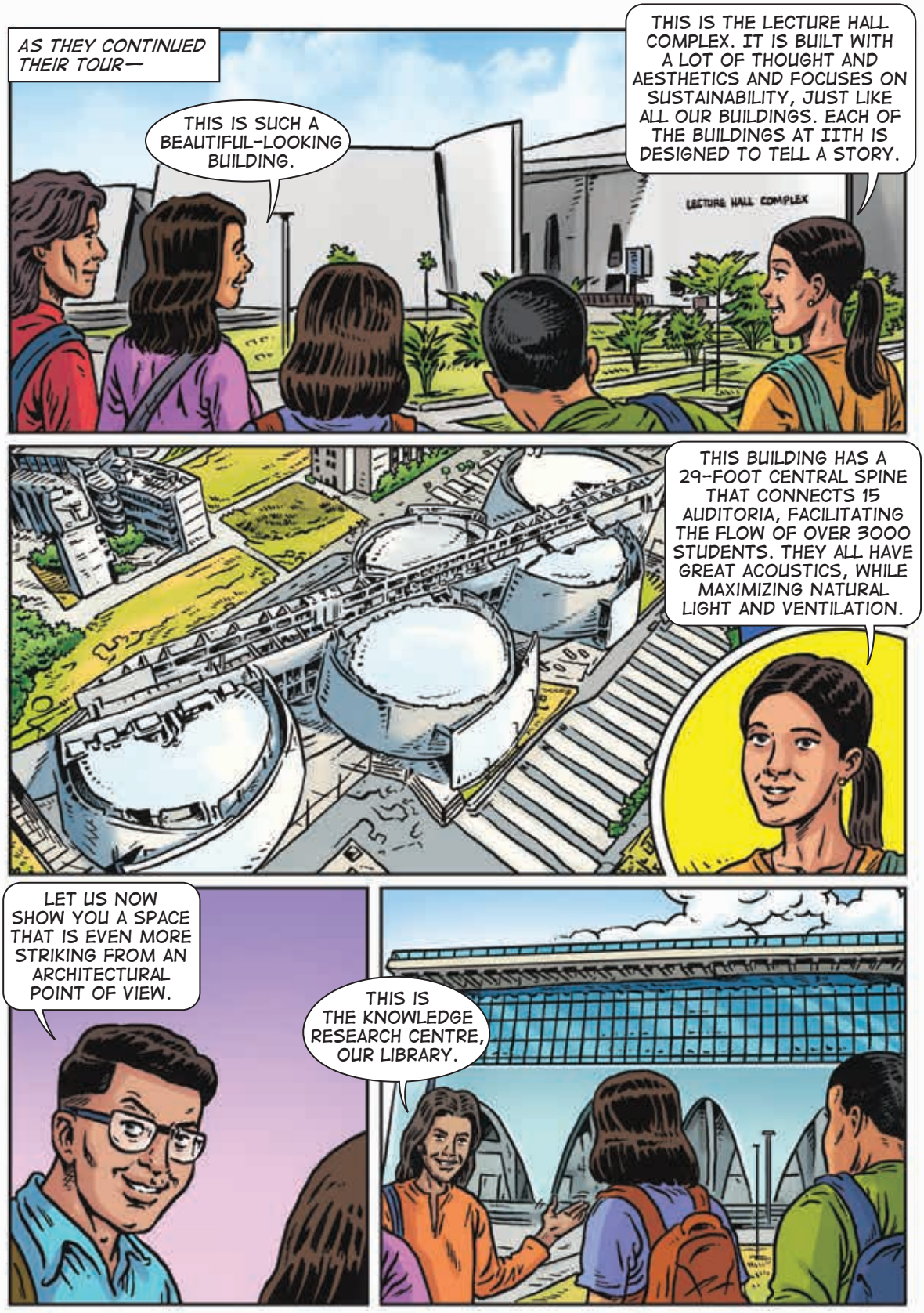

THAT'S TRUE. NOT JUST FOR THE CANTEENS, BUT ALSO FOR THE INFRASTRUCTURE, FACILITIES AND UNIQUE ACADEMIC PROGRAMMES.
I DON'T EVEN KNOW WHAT SUBJECTS I LIKE. SOMETIMES I THINK I LIKE ELECTRONICS, SOMETIMES IT'S COMPUTER SCIENCE.
THAT'S ONE OF THE BEST PARTS OF BEING HERE. WE HAVE FREE ELECTIVES, WHICH LETS US EARN CREDITS BY EXPLORING ANY SUBJECT ON CAMPUS.
THIS MEANS WE CAN COMBINE CORE ENGINEERING WITH ELECTIVES IN AI, BIOLOGY, MATERIALS, DESIGN, ETC. SO, WE CAN GET CREDITS IN WHATEVER INTERESTS US.
"IIT HYDERABAD HAS PIONEERED A UNIQUE CURRICULUM SYSTEM CALLED FRACTAL ACADEMICS. THIS MEANS THE COURSES ARE BROKEN DOWN INTO SMALLER MODULES."
AI
INTRO TO AI
"INSTEAD OF A 3-CREDIT COURSE, WE CAN TAKE COURSES FOR 1 OR 1.5 CREDITS. SO AN ELECTRONICS STUDENT CAN TAKE A 1-CREDIT 'INTRO TO AI' COURSE. THUS, STUDENTS CAN EFFECTIVELY DESIGN THEIR OWN CURRICULUM."

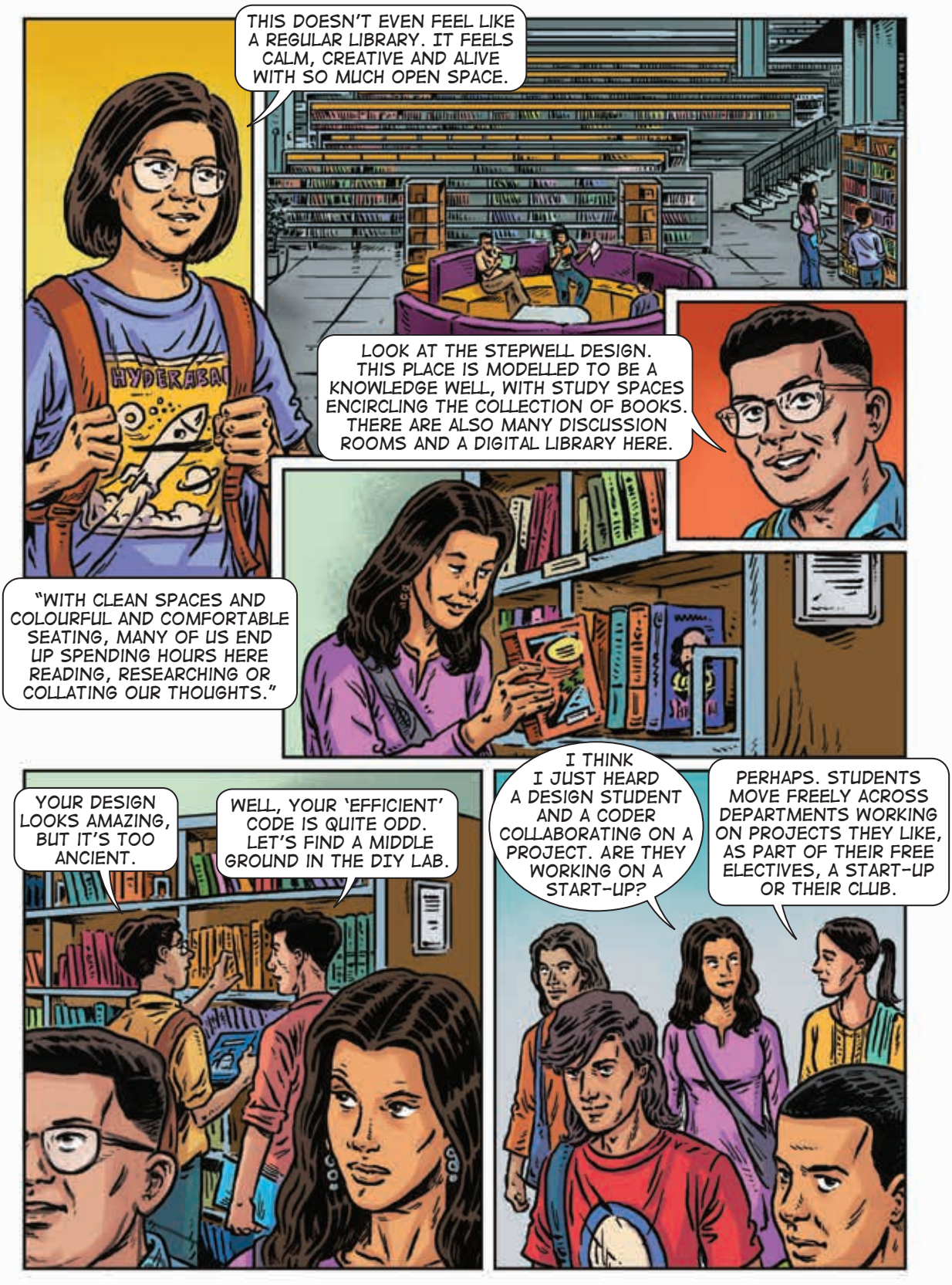

ADDITIONALLY, ALL UNDERGRADUATES EARN ABOUT 10 PER CENT OF THEIR TOTAL CREDITS FROM LIBERAL ARTS AND CREATIVE ARTS COURSES, ENSURING A WELL-ROUNDED EXPERIENCE. I HAVE TAKEN A ONE-CREDIT COURSE IN MADHUBANI PAINTING.
COMBINING TECHNICAL KNOWLEDGE WITH CREATIVE EXPERIENCES HAS REALLY CHANGED MY PERSPECTIVE.
A NEW CENTRE FOR CREATIVE ARTS WAS LAUNCHED RECENTLY. MANY DISTINGUISHED ARTISTES LIKE L. SUBRAMANIAM AND SUDHA RAGHUNATHAN ARE HONORARY PROFESSORS HERE!
THAT IS BRILLIANT! I'M A HUGE FAN OF SUDHA RAGHUNATHAN.
THIS PLACE REALLY OFFERS EVERYTHING A STUDENT CAN DREAM OF.
THAT'S TRUE. WITH THE BUILD PROGRAMME, FREE ELECTIVES AND FRACTAL ACADEMICS, THE ACADEMIC FREEDOM YOU GET HERE TRULY EXPANDS YOUR MIND, GIVING YOU THE SPACE TO EXPLORE WHO YOU REALLY WANT TO BE.

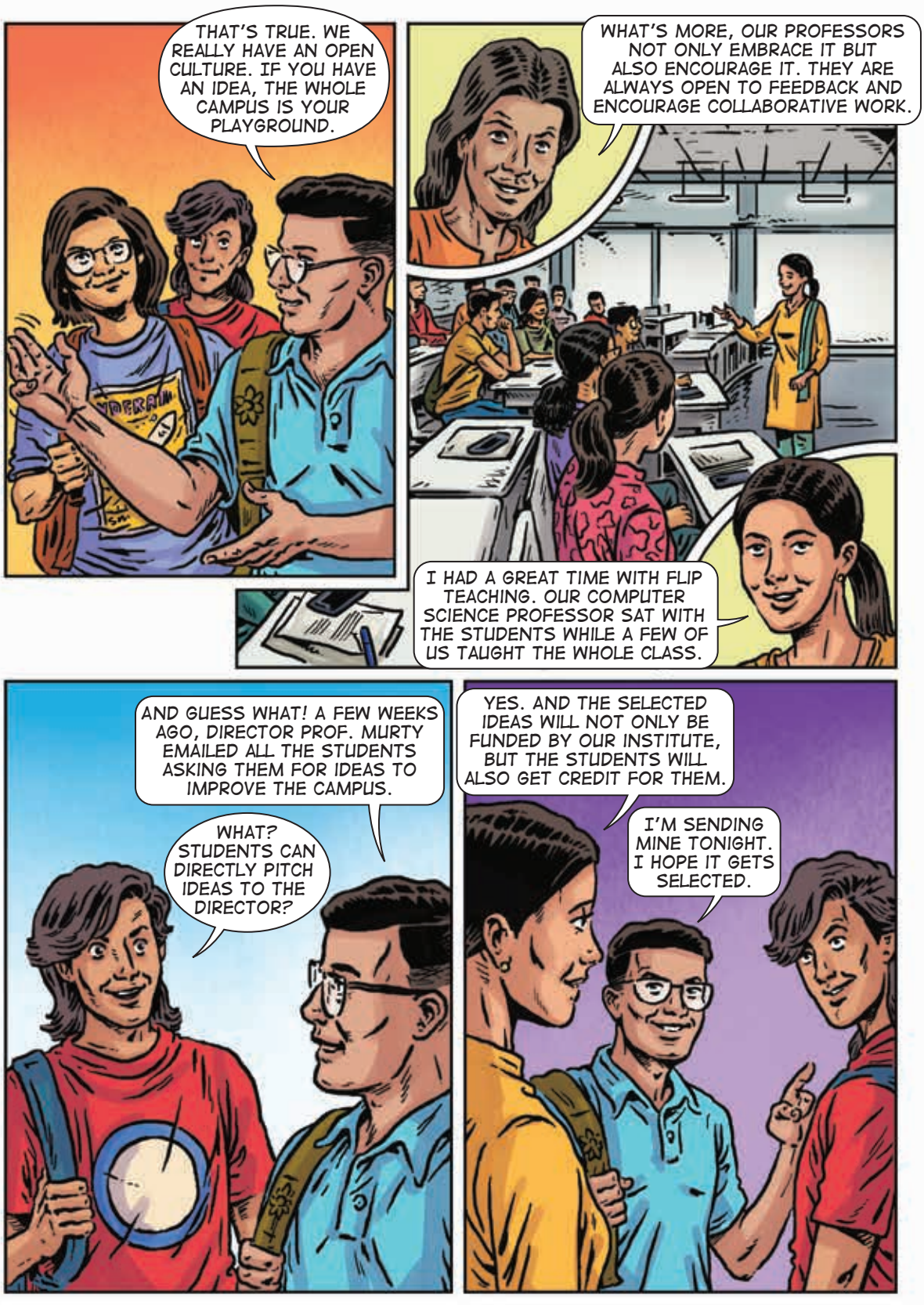

I LOVE DANCE. SO IF I COME HERE, I CAN PURSUE DANCE ALONG WITH ANY OTHER COURSE I'M TAKING.
OF COURSE YOU CAN. YOU CAN ACTUALLY DANCE WITH OTHER STUDENTS WHO HAVE THE SAME INTEREST AS YOURS.
"WE HAVE OVER 50 CLUBS THAT STUDENTS CAN JOIN. FROM MUSIC, THEATRE AND POETRY TO RURAL DEVELOPMENT, ROBOTICS AND ASTRONOMY, THERE ARE CLUBS CATERING TO EVERY INTEREST."
PAINTING
ROBOTICS
RURAL DEVELOPMENT
THE SUNSHINE CLUB IS A STUDENT-LED INITIATIVE FOCUSED ON COUNSELLING AND MENTAL WELL-BEING. SO STUDENTS SUPPORT EACH OTHER AND NO ONE FEELS LIKE THEY'RE STRUGGLING ALONE.
IT'S BEAUTIFUL. IN A PLACE WHERE EVERYONE'S PUSHING FOR ACADEMIC EXCELLENCE, LOOKING OUT FOR ONE ANOTHER FEELS LIKE A SAFETY NET.
I'M FASCINATED BY ARTIFICIAL INTELLIGENCE. I'VE BEEN TRYING TO CREATE MY OWN AI AGENT, BUT I'VE HIT A FEW ROADBLOCKS.
DID YOU KNOW THAT OUR INSTITUTE WAS THE FIRST IN INDIA TO OFFER A FULL-FLEDGED B.TECH PROGRAMME IN ARTIFICIAL INTELLIGENCE?

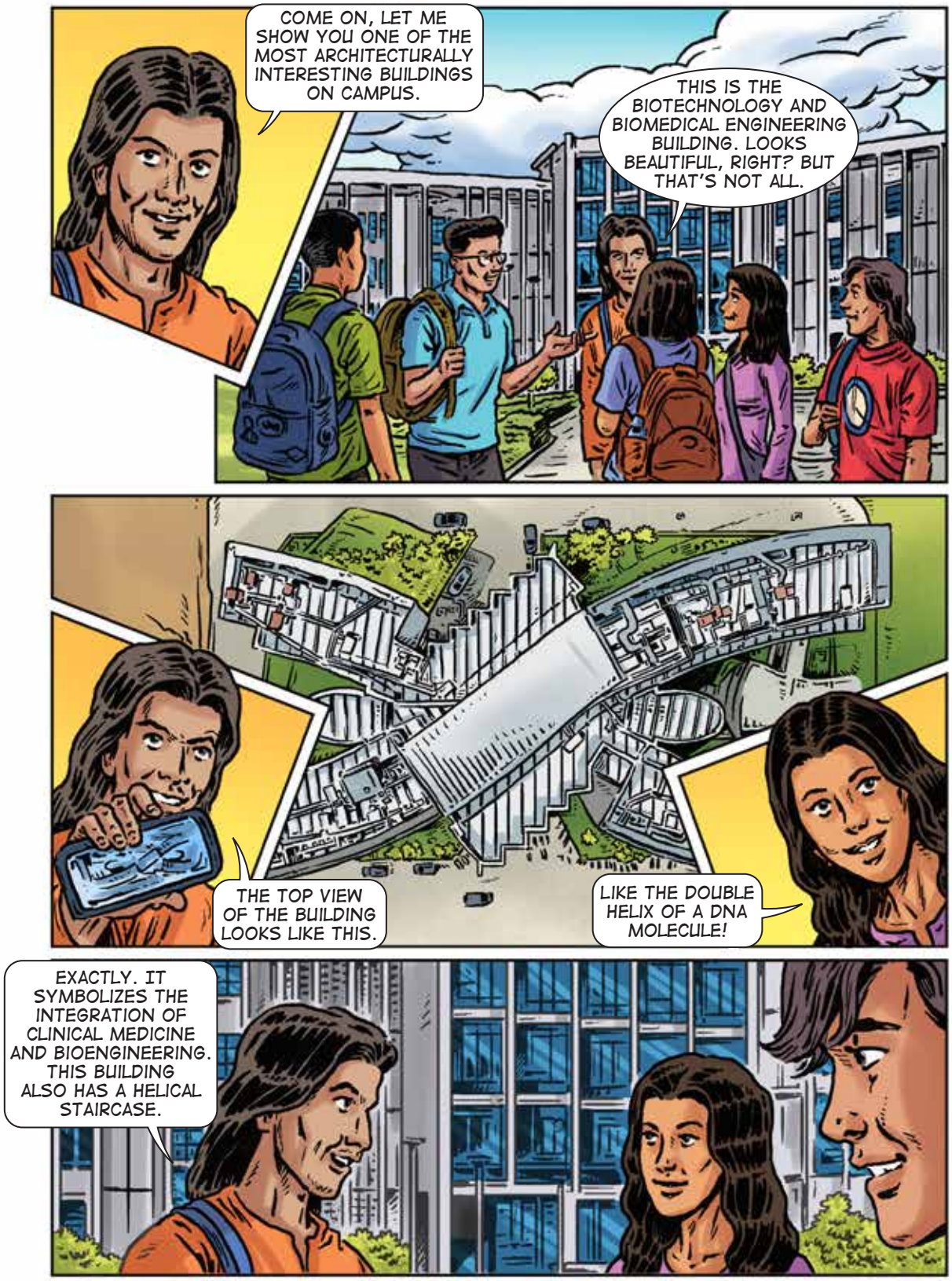

AND DON'T FORGET EPOCH, THE MACHINE LEARNING CLUB FOR AI ENTHUSIASTS. STUDENTS GET TO SHAPE THE FUTURE OF AI THROUGH HANDS-ON PROJECTS, SESSIONS, WORKSHOPS, HACKATHONS AND STUDY GROUPS.
LINEAR REGRESSIONS
TRULY, ALL THE STUDENTS HERE CAN PURSUE THEIR DREAMS AND PASSIONS! THIS PLACE REALLY LETS PEOPLE EXPLORE EVERY SIDE OF THEMSELVES, DOESN'T IT?
IT SURE DOES. COME ON! WE HAVE MANY MORE PLACES TO SEE.
NOW THAT I HAVE EATEN WELL, I HAVE ENOUGH ENERGY TO WALK ALL DAY LONG.
YOU MAY JUST HAVE TO!
I LOVE VIRTUAL REALITY GAMES. I WONDER IF THERE IS SOMETHING RELATED TO THAT.
YES! AND THIS IS WHERE IT HAPPENS. THIS IS THE DEPARTMENT OF DESIGN AND IT OFFERS COURSES IN INTERACTION DESIGN, AI AND VIRTUAL ENVIRONMENTS.

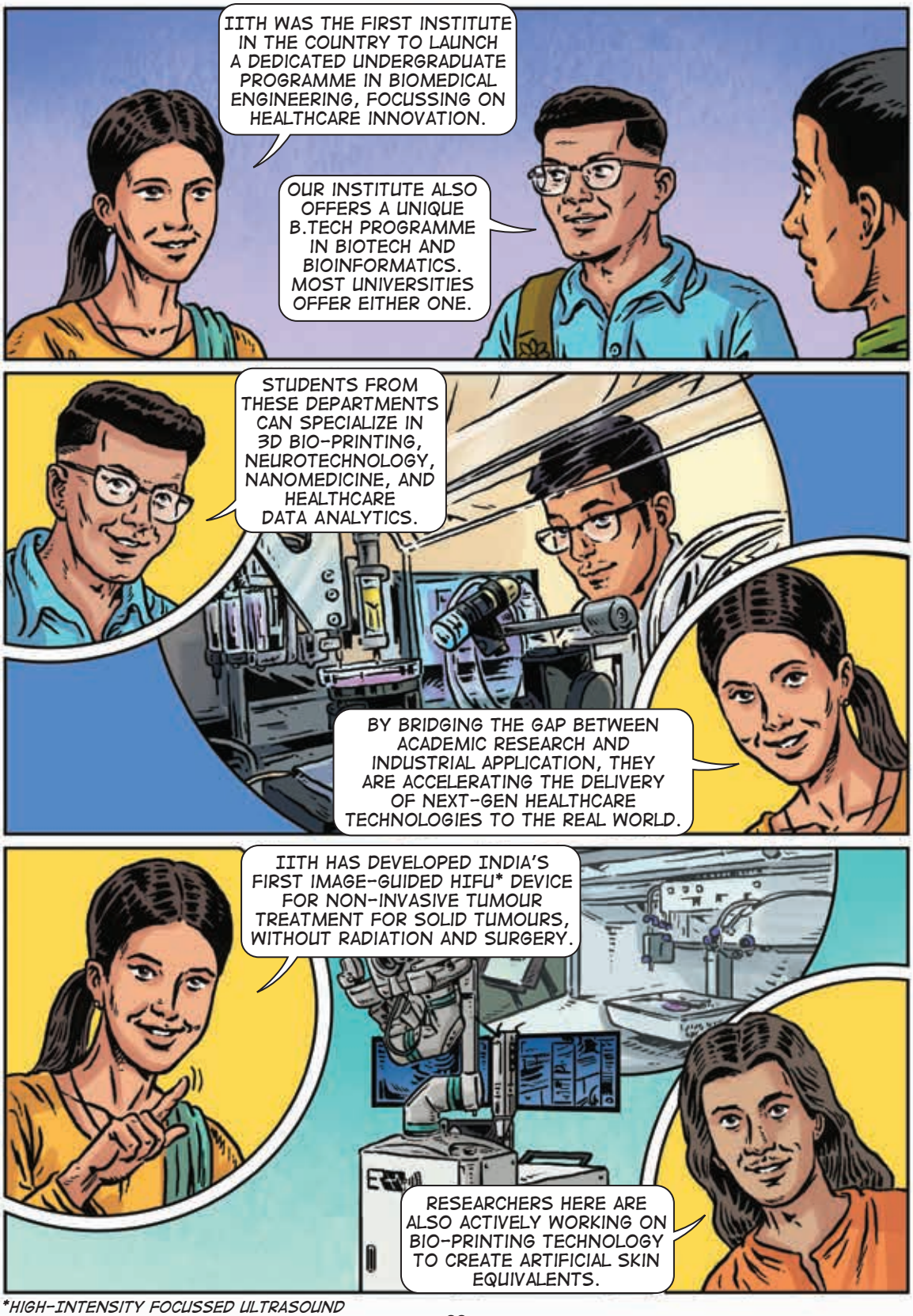

IT HAS SPECIALIZED LABS LIKE A VIRTUAL EXPERIENCE DESIGN LAB, A GRAPHIC DESIGN AND UI-UX LAB, A DIGITAL HERITAGE LAB AND A VR CAVE.
WOW! WHAT'S THAT?
COME, LET US SHOW YOU.
THIS IS A VIRTUAL REALITY SPACE IN WHICH ALL THE SURFACES INCLUDING THE WALLS, FLOOR AND CEILING CAN BE USED AS PROJECTION SCREENS. THIS HELPS WITH ARCHITECTURAL AND HERITAGE VISUALIZATION. I'LL LOAD A GAME AND YOU CAN VIEW IT WITH THESE!
WOW!
UNBELIEVABLE! THAT FELT LIKE STEPPING INTO ANOTHER WORLD!
ALONG WITH ENGINEERING, I'M DOING A DESIGN MINOR. THERE ARE MANY COOL THINGS WE DO LIKE DIGITAL PRESERVATION OF HERITAGE SITES, GAME DESIGN, METAL AND WOODWORK, 3D CONCRETE PRINTING AND MORE.


AS THEY CONTINUED THEIR TOUR—
THIS IS SUCH A BEAUTIFUL-LOOKING BUILDING.
THIS IS THE LECTURE HALL COMPLEX. IT IS BUILT WITH A LOT OF THOUGHT AND AESTHETICS AND FOCUSES ON SUSTAINABILITY, JUST LIKE ALL OUR BUILDINGS. EACH OF THE BUILDINGS AT IITH IS DESIGNED TO TELL A STORY.
LECTURE HALL COMPLEX
THIS BUILDING HAS A 29-FOOT CENTRAL SPINE THAT CONNECTS 15 AUDITORIA, FACILITATING THE FLOW OF OVER 3000 STUDENTS. THEY ALL HAVE GREAT ACOUSTICS, WHILE MAXIMIZING NATURAL LIGHT AND VENTILATION.
LET US NOW SHOW YOU A SPACE THAT IS EVEN MORE STRIKING FROM AN ARCHITECTURAL POINT OF VIEW.
THIS IS THE KNOWLEDGE RESEARCH CENTRE, OUR LIBRARY.


THIS DOESN'T EVEN FEEL LIKE A REGULAR LIBRARY. IT FEELS CALM, CREATIVE AND ALIVE WITH SO MUCH OPEN SPACE.
HYDERABAD
LOOK AT THE STEPWELL DESIGN. THIS PLACE IS MODELLED TO BE A KNOWLEDGE WELL, WITH STUDY SPACES ENCIRCLING THE COLLECTION OF BOOKS. THERE ARE ALSO MANY DISCUSSION ROOMS AND A DIGITAL LIBRARY HERE.
"WITH CLEAN SPACES AND COLOURFUL AND COMFORTABLE SEATING, MANY OF US END UP SPENDING HOURS HERE READING, RESEARCHING OR COLLATING OUR THOUGHTS."
YOUR DESIGN LOOKS AMAZING, BUT IT'S TOO ANCIENT.
WELL, YOUR 'EFFICIENT' CODE IS QUITE ODD. LET'S FIND A MIDDLE GROUND IN THE DIY LAB.
I THINK I JUST HEARD A DESIGN STUDENT AND A CODER COLLABORATING ON A PROJECT. ARE THEY WORKING ON A START-UP?
PERHAPS. STUDENTS MOVE FREELY ACROSS DEPARTMENTS WORKING ON PROJECTS THEY LIKE, AS PART OF THEIR FREE ELECTIVES, A START-UP OR THEIR CLUB.

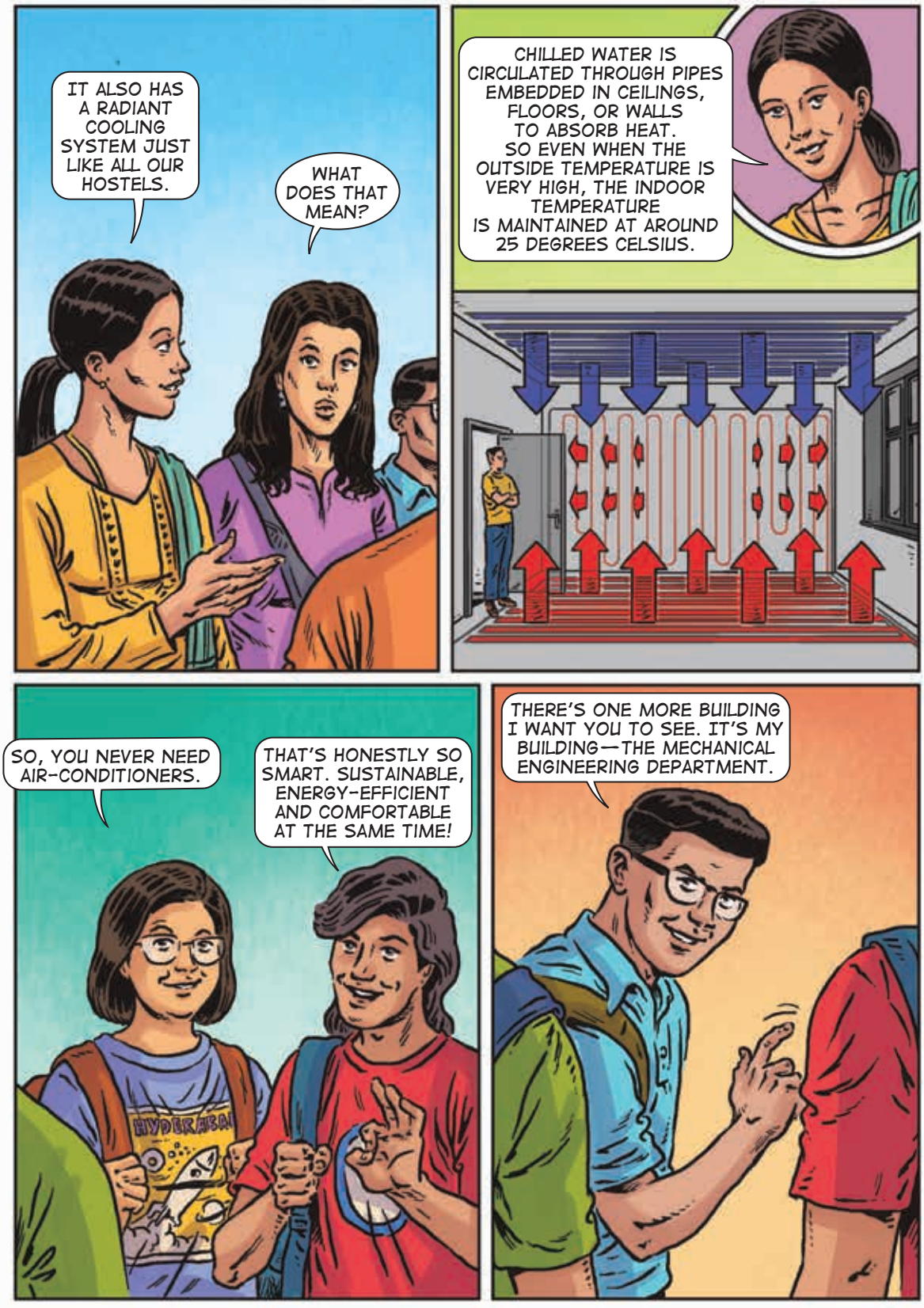

THAT'S TRUE. WE REALLY HAVE AN OPEN CULTURE. IF YOU HAVE AN IDEA, THE WHOLE CAMPUS IS YOUR PLAYGROUND.
WHAT'S MORE, OUR PROFESSORS NOT ONLY EMBRACE IT BUT ALSO ENCOURAGE IT. THEY ARE ALWAYS OPEN TO FEEDBACK AND ENCOURAGE COLLABORATIVE WORK.
I HAD A GREAT TIME WITH FLIP TEACHING. OUR COMPUTER SCIENCE PROFESSOR SAT WITH THE STUDENTS WHILE A FEW OF US TAUGHT THE WHOLE CLASS.
AND GUESS WHAT! A FEW WEEKS AGO, DIRECTOR PROF. MURTY EMAILED ALL THE STUDENTS ASKING THEM FOR IDEAS TO IMPROVE THE CAMPUS.
WHAT? STUDENTS CAN DIRECTLY PITCH IDEAS TO THE DIRECTOR?
YES. AND THE SELECTED IDEAS WILL NOT ONLY BE FUNDED BY OUR INSTITUTE, BUT THE STUDENTS WILL ALSO GET CREDIT FOR THEM.
I'M SENDING MINE TONIGHT. I HOPE IT GETS SELECTED.

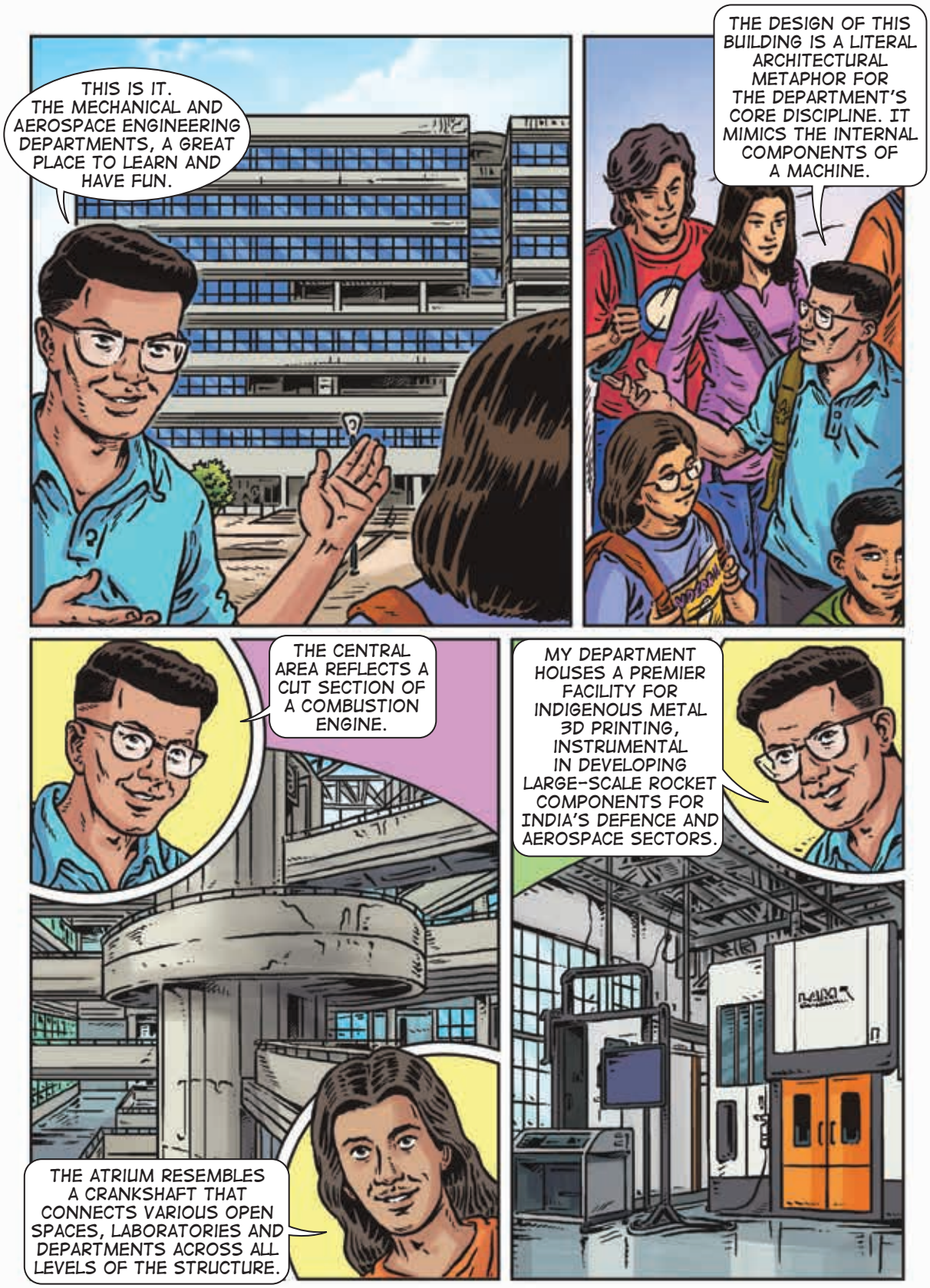

COME ON, LET ME SHOW YOU ONE OF THE MOST ARCHITECTURALLY INTERESTING BUILDINGS ON CAMPUS.
THIS IS THE BIOTECHNOLOGY AND BIOMEDICAL ENGINEERING BUILDING. LOOKS BEAUTIFUL, RIGHT? BUT THAT'S NOT ALL.
THE TOP VIEW OF THE BUILDING LOOKS LIKE THIS.
LIKE THE DOUBLE HELIX OF A DNA MOLECULE!
EXACTLY. IT SYMBOLIZES THE INTEGRATION OF CLINICAL MEDICINE AND BIOENGINEERING. THIS BUILDING ALSO HAS A HELICAL STAIRCASE.



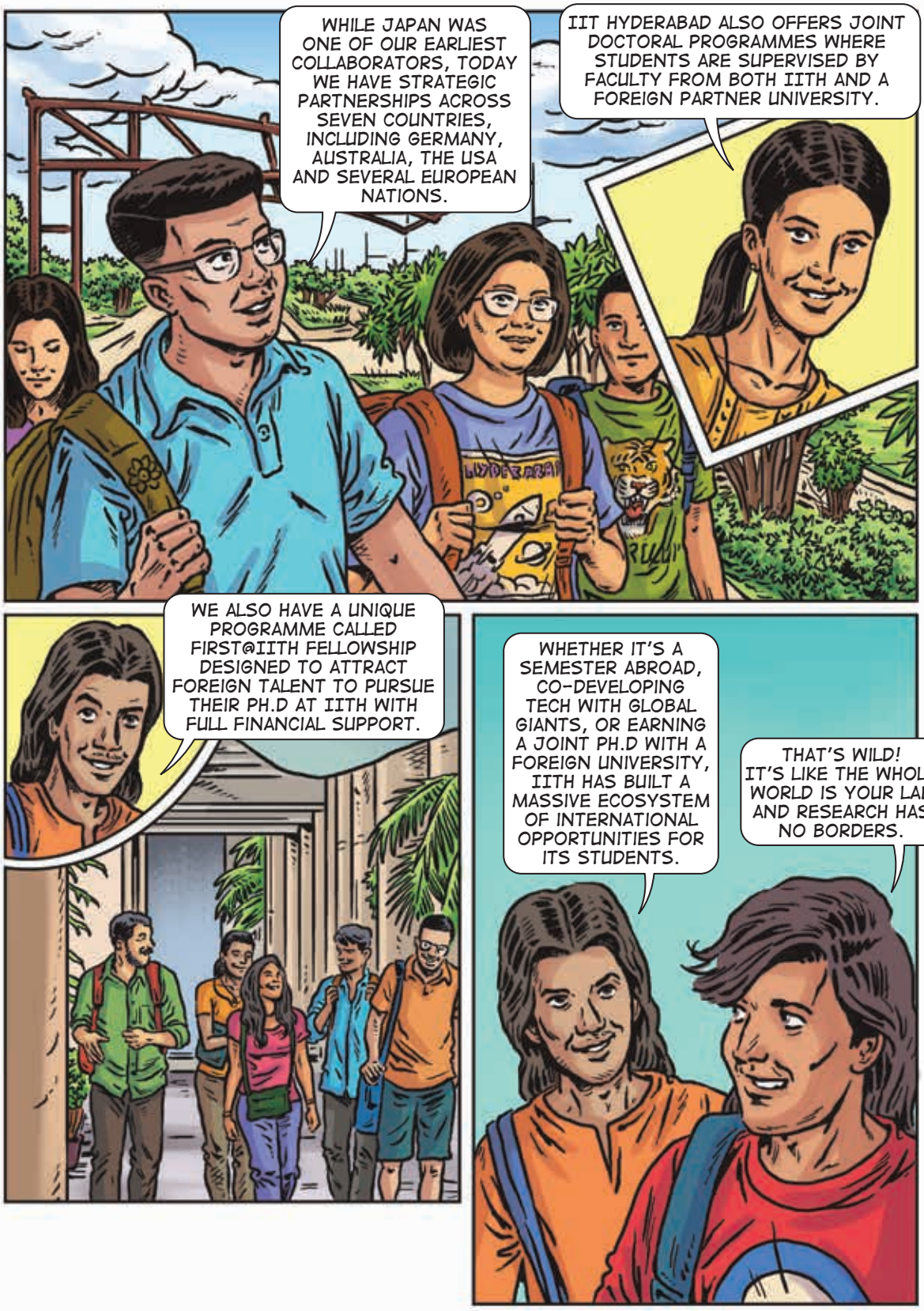
*HIGH-INTENSITY FOCUSSED ULTRASOUND

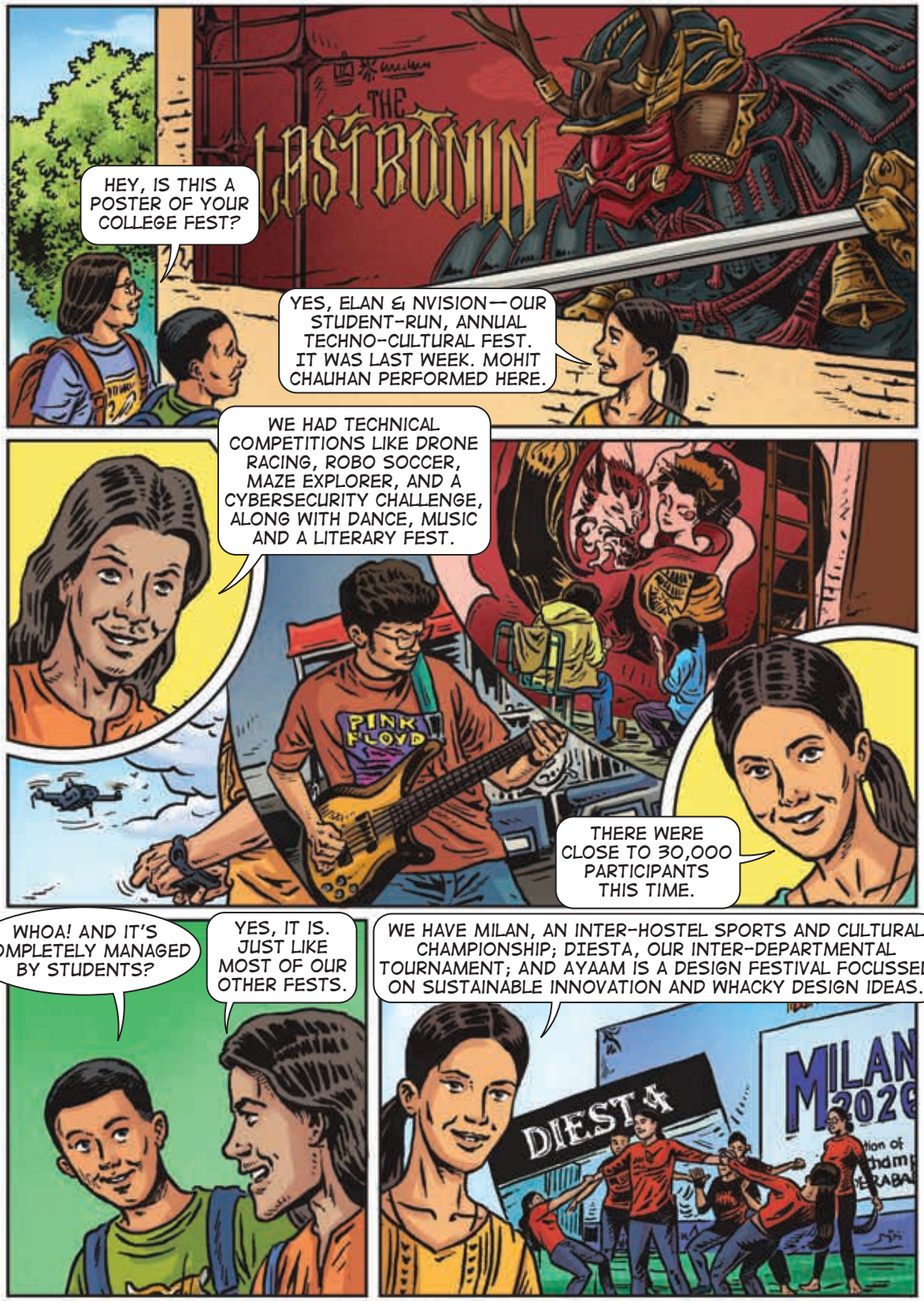

COME ON! LET ME SHOW YOU SOME MORE INTERESTING BUILDINGS.
A SHORT WALK LATER—
THIS IS THE CIVIL ENGINEERING DEPARTMENT.
WHAT'S UNIQUE ABOUT THIS BUILDING IS THAT IT IS DESIGNED AS A LIVING LABORATORY WITH DIFFERENT CONSTRUCTION MATERIALS TO FACILITATE REAL-WORLD LEARNING. THE FRONT HALF IS MADE WITH EXPOSED STEEL TRUSSES. THE REAR WITH EXPOSED CONCRETE.
THE TWO SECTIONS ARE CONNECTED BY STEEL BRIDGES ACROSS FOUR FLOORS, ALLOWING STUDENTS TO OBSERVE AND COMPARE THE PERFORMANCE AND STRUCTURAL BEHAVIOUR OF STEEL AND CONCRETE IN A SINGLE FACILITY.
THIS DEPARTMENT MADE INDIA'S FIRST 3D-PRINTED PEDESTRIAN BRIDGE, A 7.5-METRE LONG STRUCTURE WHICH IS INSTALLED ON CAMPUS.

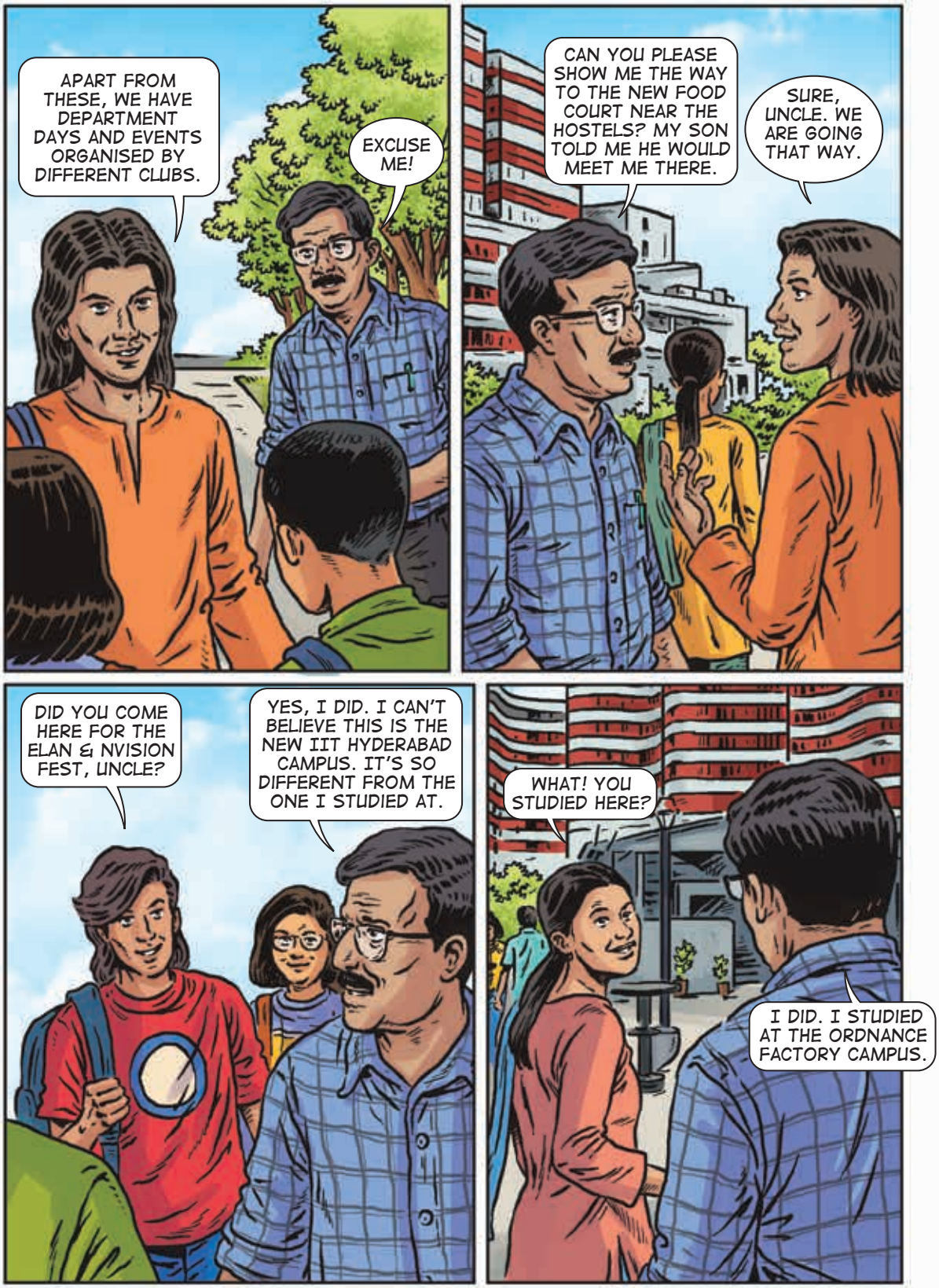

IT ALSO HAS A RADIANT COOLING SYSTEM JUST LIKE ALL OUR HOSTELS.
WHAT DOES THAT MEAN?
CHILLED WATER IS CIRCULATED THROUGH PIPES EMBEDDED IN CEILINGS, FLOORS, OR WALLS TO ABSORB HEAT. SO EVEN WHEN THE OUTSIDE TEMPERATURE IS VERY HIGH, THE INDOOR TEMPERATURE IS MAINTAINED AT AROUND 25 DEGREES CELSIUS.
SO, YOU NEVER NEED AIR-CONDITIONERS.
THAT'S HONESTLY SO SMART. SUSTAINABLE, ENERGY-EFFICIENT AND COMFORTABLE AT THE SAME TIME!
HYDERABAD
THERE'S ONE MORE BUILDING I WANT YOU TO SEE. IT'S MY BUILDING—THE MECHANICAL ENGINEERING DEPARTMENT.

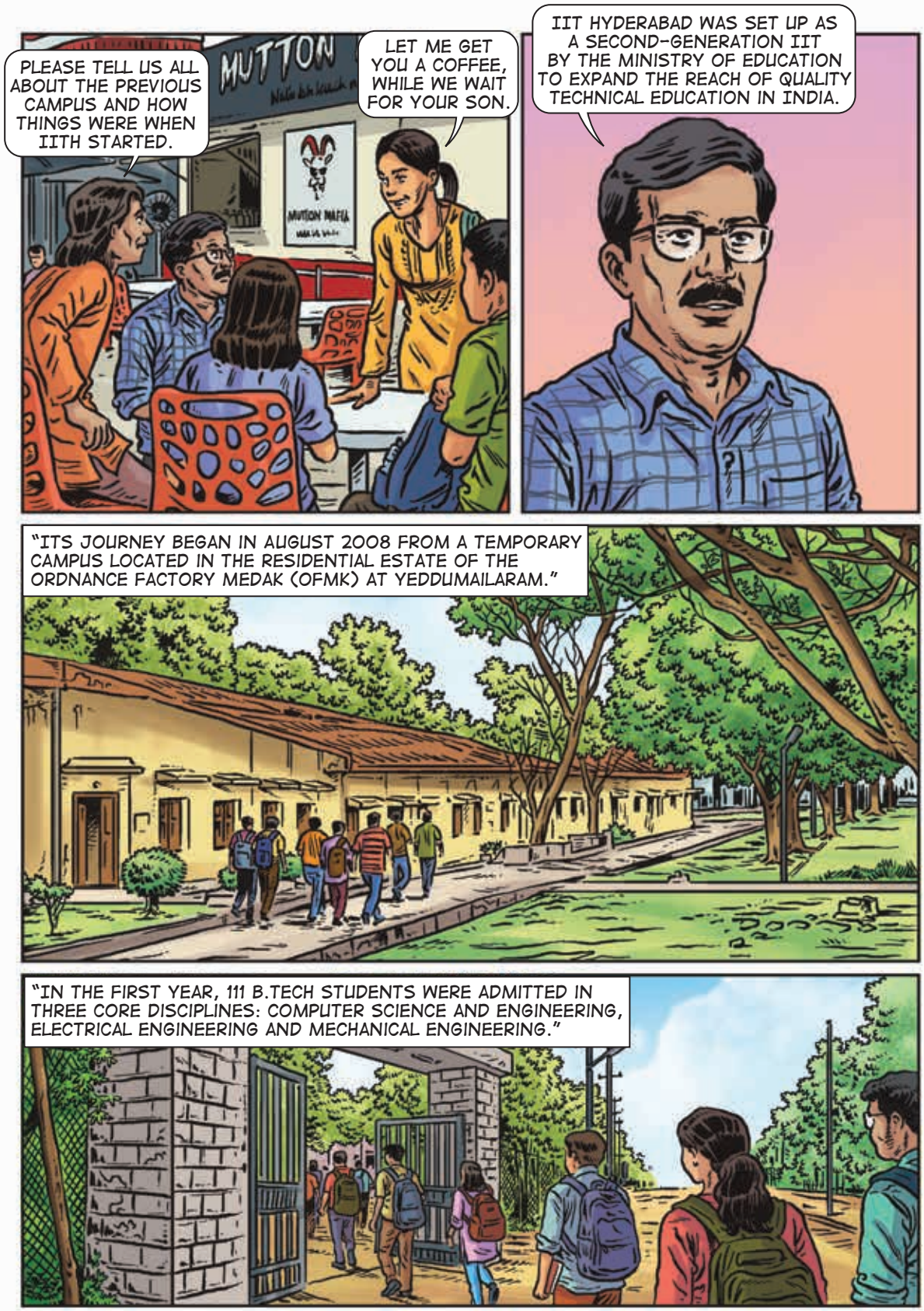

THIS IS IT. THE MECHANICAL AND AEROSPACE ENGINEERING DEPARTMENTS, A GREAT PLACE TO LEARN AND HAVE FUN.
THE DESIGN OF THIS BUILDING IS A LITERAL ARCHITECTURAL METAPHOR FOR THE DEPARTMENT'S CORE DISCIPLINE. IT MIMICS THE INTERNAL COMPONENTS OF A MACHINE.
THE CENTRAL AREA REFLECTS A CUT SECTION OF A COMBUSTION ENGINE.
THE ATRIUM RESEMBLES A CRANKSHAFT THAT CONNECTS VARIOUS OPEN SPACES, LABORATORIES AND DEPARTMENTS ACROSS ALL LEVELS OF THE STRUCTURE.
MY DEPARTMENT HOUSES A PREMIER FACILITY FOR INDIGENOUS METAL 3D PRINTING, INSTRUMENTAL IN DEVELOPING LARGE-SCALE ROCKET COMPONENTS FOR INDIA'S DEFENCE AND AEROSPACE SECTORS.


HEY, COME ALONG. LET US SHOW YOU OUR CAFE. IT'S RIGHT HERE IN THIS BUILDING.
STUDENTS HAVE MANY FOOD AND DRINKS OPTIONS HERE. AND IT IS A GREAT PLACE TO HANG OUT.
WE CAN MEET OUR FRIENDS AND CATCH UP BETWEEN LECTURES. BUT ENOUGH ABOUT THE CAFE. THERE'S MORE TO EXPLORE!
SHE'S RIGHT! LET'S GO.
IITH HAS MASSIVE JOINT RESEARCH PROGRAMMES AND EXCHANGE DEALS WITH OVER 20 JAPANESE UNIVERSITIES. WE EVEN CELEBRATE JAPAN CAREER DAY AND JAPAN ACADEMIC DAY EVERY YEAR TO HONOUR OUR RELATIONSHIP WITH JAPAN.
2025
JAPAN
ACADEMIC DAY
THESE PROGRAMMES ARE SOME OF MY FAVOURITES!


WHILE JAPAN WAS ONE OF OUR EARLIEST COLLABORATORS, TODAY WE HAVE STRATEGIC PARTNERSHIPS ACROSS SEVEN COUNTRIES, INCLUDING GERMANY, AUSTRALIA, THE USA AND SEVERAL EUROPEAN NATIONS.
IIT HYDERABAD ALSO OFFERS JOINT DOCTORAL PROGRAMMES WHERE STUDENTS ARE SUPERVISED BY FACULTY FROM BOTH IITH AND A FOREIGN PARTNER UNIVERSITY.
WE ALSO HAVE A UNIQUE PROGRAMME CALLED FIRST@IITH FELLOWSHIP DESIGNED TO ATTRACT FOREIGN TALENT TO PURSUE THEIR PH.D AT IITH WITH FULL FINANCIAL SUPPORT.
WHETHER IT'S A SEMESTER ABROAD, CO-DEVELOPING TECH WITH GLOBAL GIANTS, OR EARNING A JOINT PH.D WITH A FOREIGN UNIVERSITY, IITH HAS BUILT A MASSIVE ECOSYSTEM OF INTERNATIONAL OPPORTUNITIES FOR ITS STUDENTS.
THAT'S WILD! IT'S LIKE THE WHOLE WORLD IS YOUR LAB AND RESEARCH HAS NO BORDERS.


THE LAST RONIN
HEY, IS THIS A POSTER OF YOUR COLLEGE FEST?
YES, ELAN & NVISION—OUR STUDENT-RUN, ANNUAL TECHNO-CULTURAL FEST. IT WAS LAST WEEK. MOHIT CHAUHAN PERFORMED HERE.
WE HAD TECHNICAL COMPETITIONS LIKE DRONE RACING, ROBO SOCCER, MAZE EXPLORER, AND A CYBERSECURITY CHALLENGE, ALONG WITH DANCE, MUSIC AND A LITERARY FEST.
PINK FLOYD
THERE WERE CLOSE TO 30,000 PARTICIPANTS THIS TIME.
WHOA! AND IT'S COMPLETELY MANAGED BY STUDENTS?
YES, IT IS. JUST LIKE MOST OF OUR OTHER FESTS.
WE HAVE MILAN, AN INTER-HOSTEL SPORTS AND CULTURAL CHAMPIONSHIP; DIESTA, OUR INTER-DEPARTMENTAL TOURNAMENT; AND AYAAM IS A DESIGN FESTIVAL FOCUSSED ON SUSTAINABLE INNOVATION AND WHACKY DESIGN IDEAS.
DIESTA
MILAN 2026


APART FROM THESE, WE HAVE DEPARTMENT DAYS AND EVENTS ORGANISED BY DIFFERENT CLUBS.
EXCUSE ME!
CAN YOU PLEASE SHOW ME THE WAY TO THE NEW FOOD COURT NEAR THE HOSTELS? MY SON TOLD ME HE WOULD MEET ME THERE.
SURE, UNCLE. WE ARE GOING THAT WAY.
DID YOU COME HERE FOR THE ELAN & NVISION FEST, UNCLE?
YES, I DID. I CAN'T BELIEVE THIS IS THE NEW IIT HYDERABAD CAMPUS. IT'S SO DIFFERENT FROM THE ONE I STUDIED AT.
WHAT! YOU STUDIED HERE?
I DID. I STUDIED AT THE ORDNANCE FACTORY CAMPUS.


PLEASE TELL US ALL ABOUT THE PREVIOUS CAMPUS AND HOW THINGS WERE WHEN IITH STARTED.
LET ME GET YOU A COFFEE, WHILE WE WAIT FOR YOUR SON.
MUTTON
IIT HYDERABAD WAS SET UP AS A SECOND-GENERATION IIT BY THE MINISTRY OF EDUCATION TO EXPAND THE REACH OF QUALITY TECHNICAL EDUCATION IN INDIA.
"ITS JOURNEY BEGAN IN AUGUST 2008 FROM A TEMPORARY CAMPUS LOCATED IN THE RESIDENTIAL ESTATE OF THE ORDNANCE FACTORY MEDAK (OFMK) AT YEDDUMAILARAM."
"IN THE FIRST YEAR, 111 B.TECH STUDENTS WERE ADMITTED IN THREE CORE DISCIPLINES: COMPUTER SCIENCE AND ENGINEERING, ELECTRICAL ENGINEERING AND MECHANICAL ENGINEERING."

"THE PH.D. PROGRAMME BEGAN IN JANUARY 2009 AND THE M.TECH PROGRAMME FOLLOWED IN AUGUST THAT YEAR. I WAS AMONG THE FIRST BATCH OF PH.D. STUDENTS."

"OFMK HAD A HUGE CAMPUS. AND WITH TANKS AND COMBAT VEHICLES BEING MANUFACTURED NEARBY, SEEING AND HEARING MILITARY HARDWARE WAS VERY COMMON."

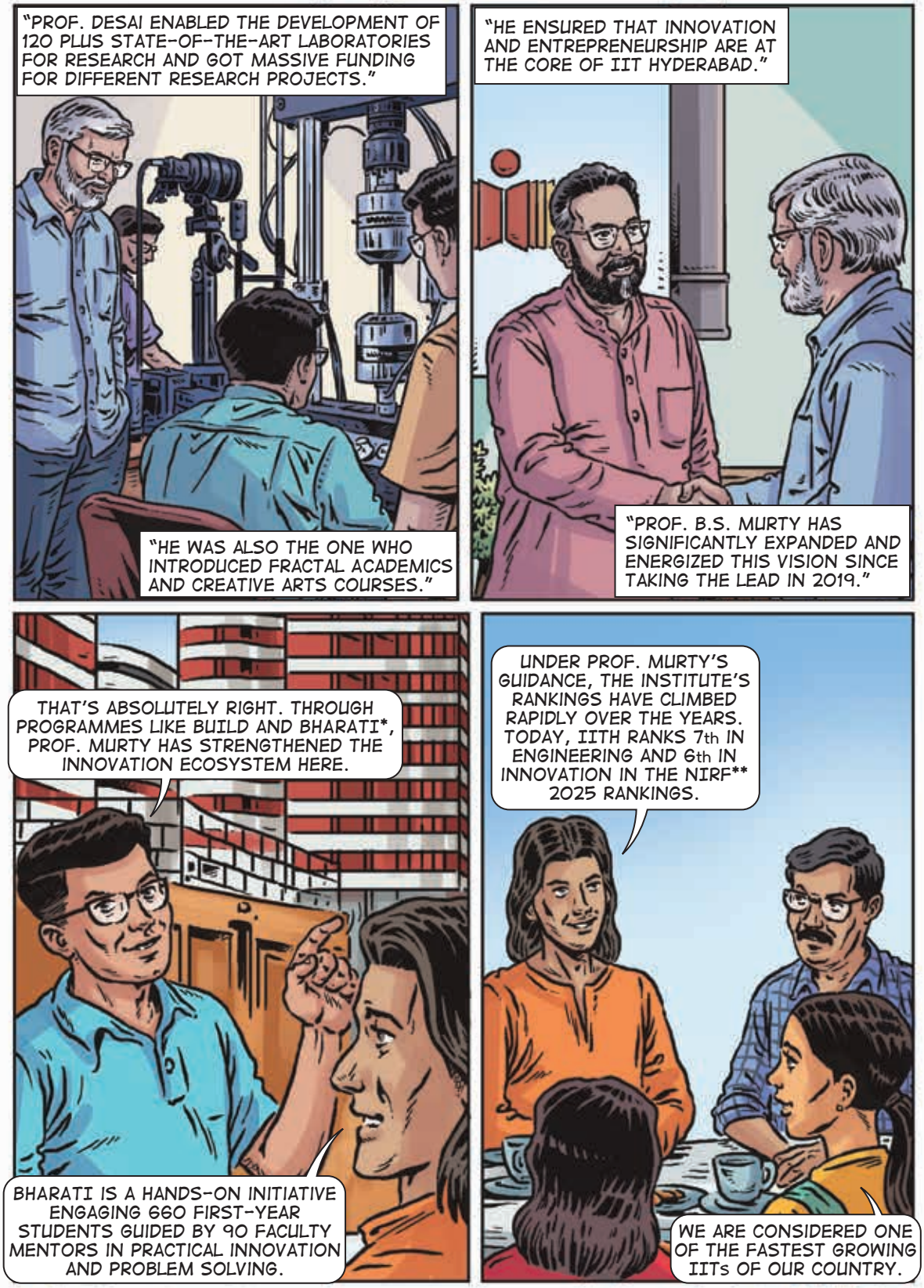
"PROF. UDAY B. DESAI, OUR FOUNDING DIRECTOR, PLAYED A CRUCIAL ROLE IN BUILDING THIS INSTITUTE. HE RECRUITED THE INITIAL FACULTY TEAM, HIRING DOZENS OF PH.D HOLDERS FROM TOP GLOBAL INSTITUTIONS."

Society
How can

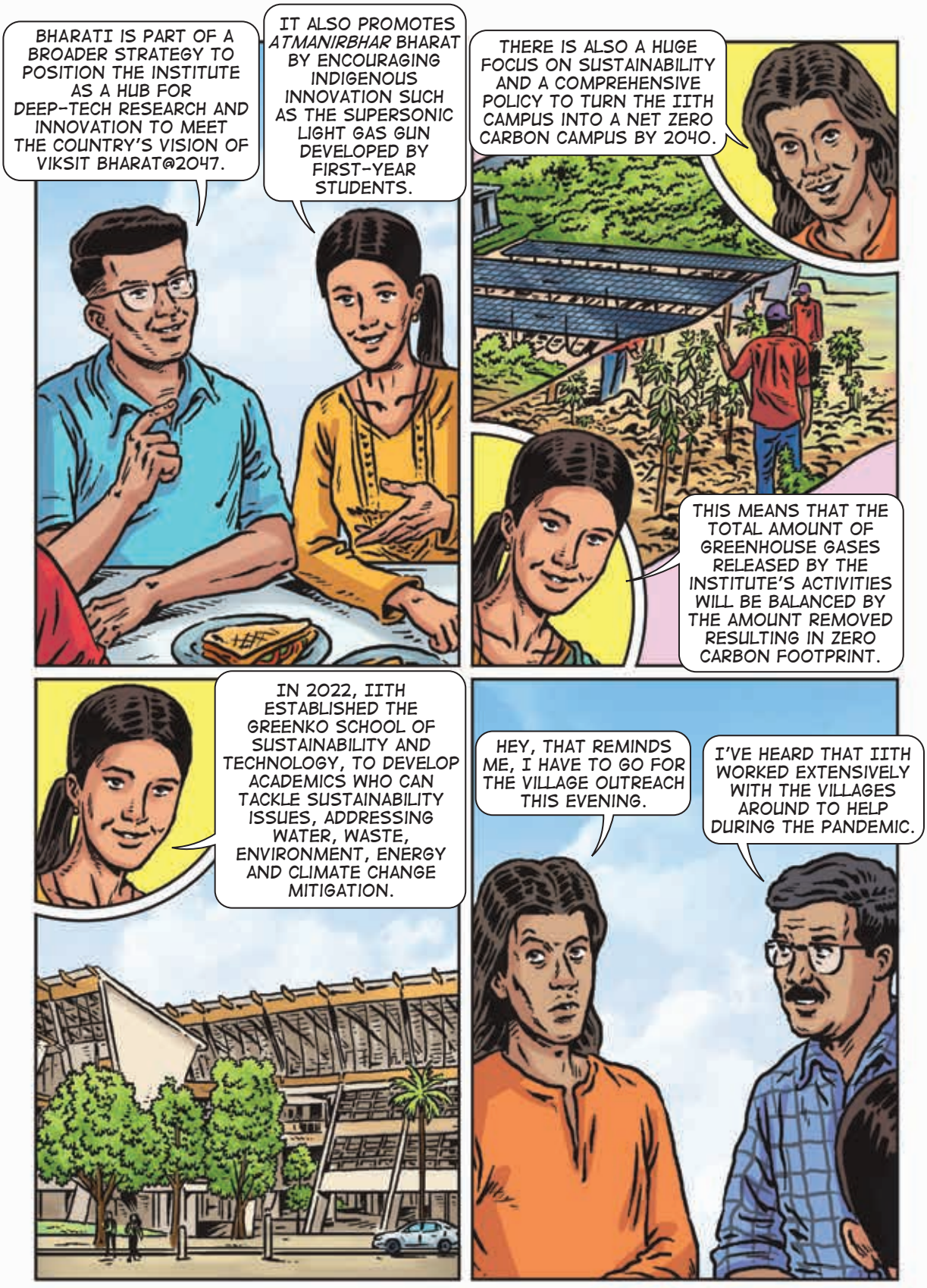
"APART FROM CORE ACADEMIC DEPARTMENTS, HE STARTED MULTIDISCIPLINARY DEPARTMENTS LIKE THE DEPARTMENT ON ENGINEERING SCIENCE AND THE DEPARTMENT OF CLIMATE CHANGE."

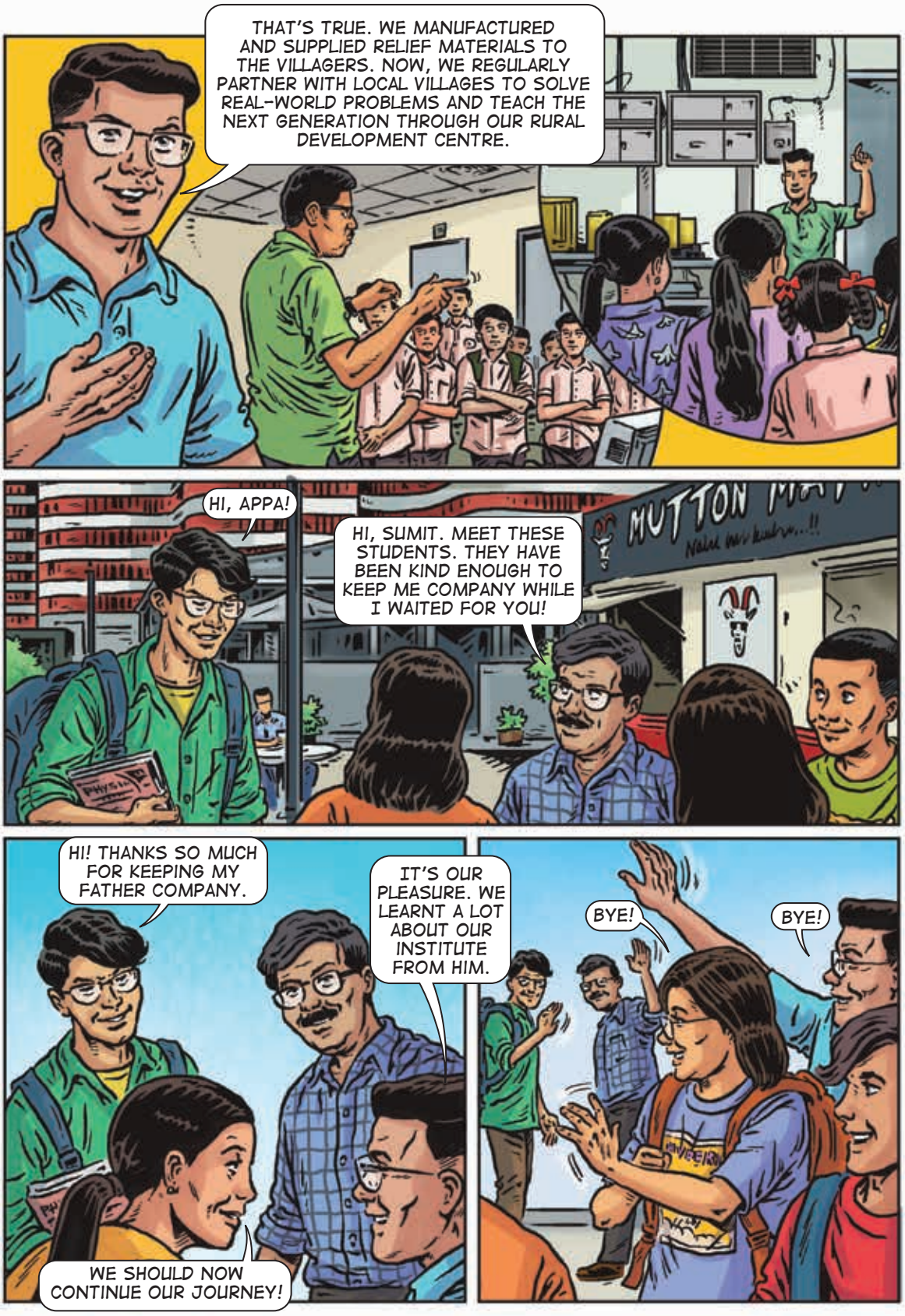
THE BEST PART HERE IS THE FLEXIBILITY. I CAN STUDY WHATEVER COURSES I LIKE.

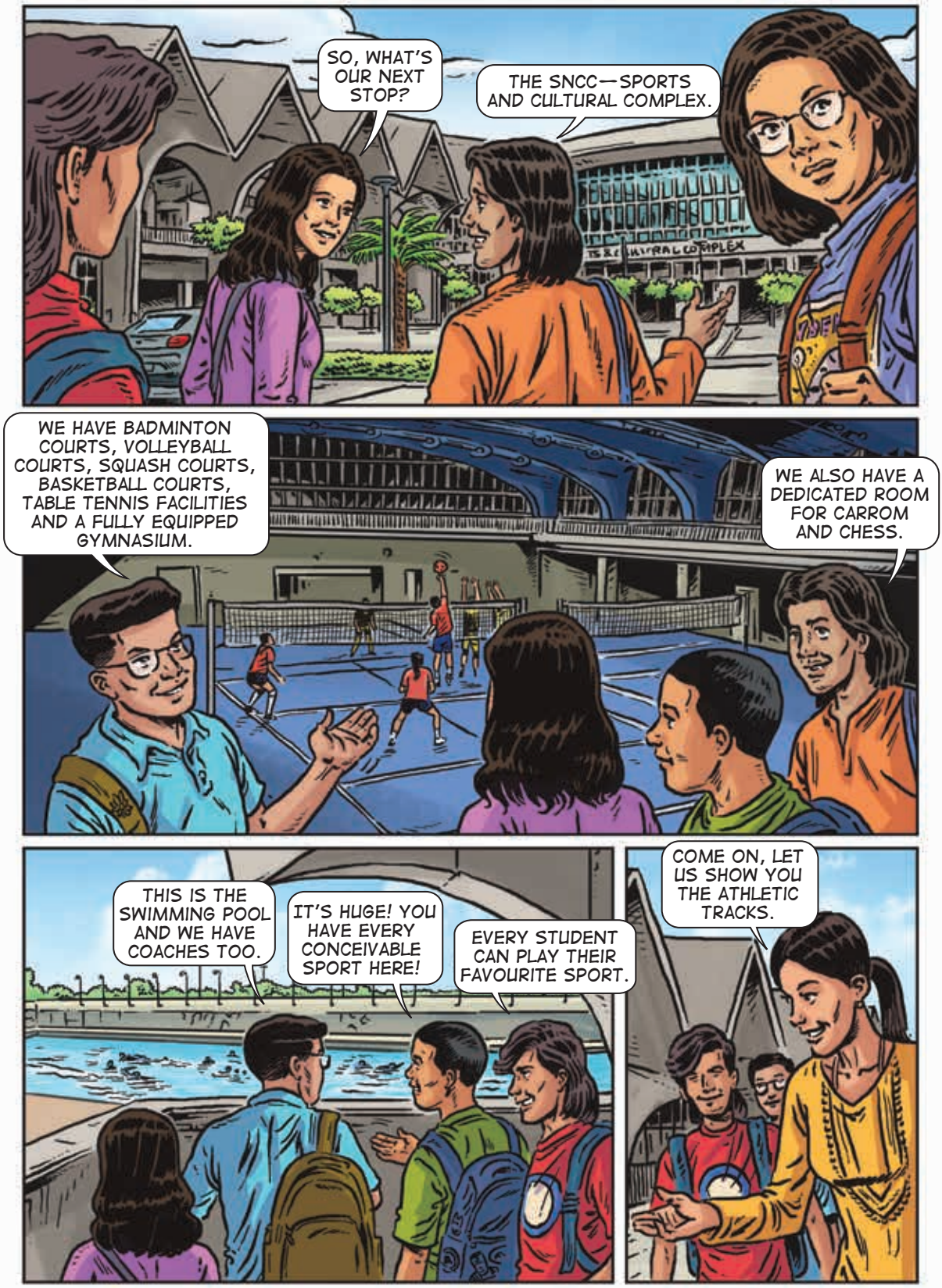
"ON 27 FEBRUARY 2009, SONIA GANDHI, CHAIRPERSON OF THE UPA, LAID THE FOUNDATION STONE OF THE PERMANENT CAMPUS AT KANDI."

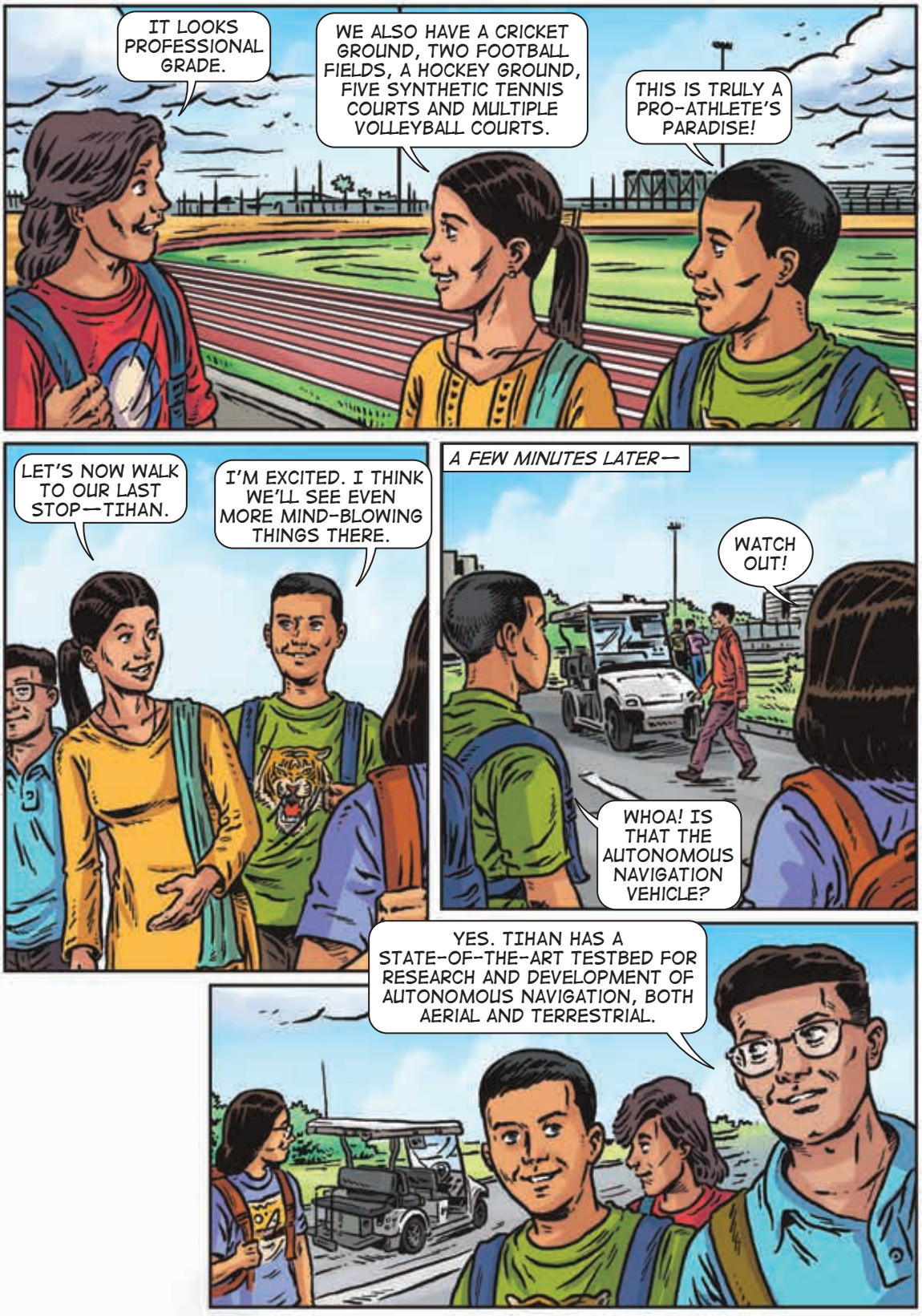


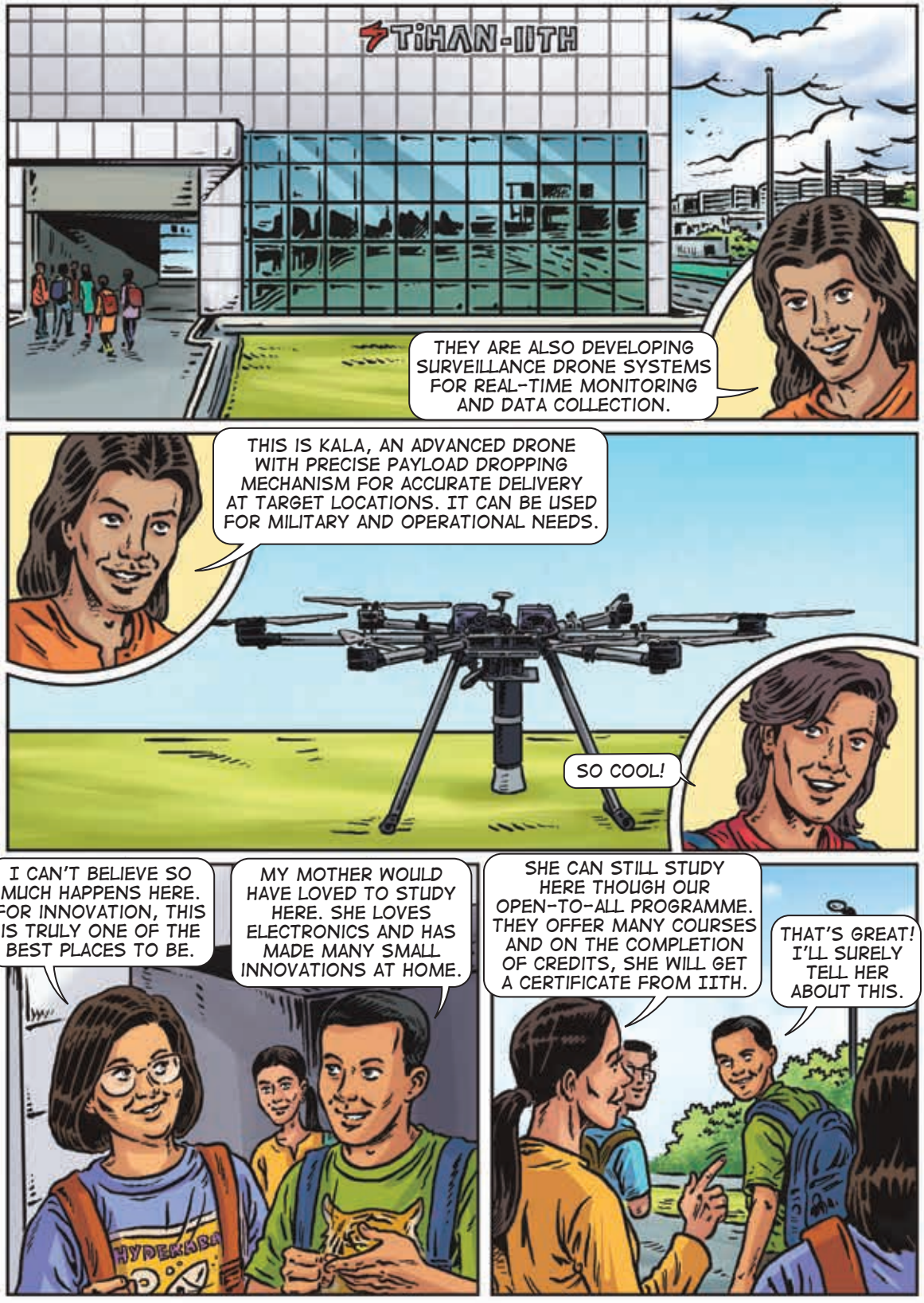
*BOLD HEARTED ASPIRANTS RAISING TO TRANSFORM INDIA
**NATIONAL INSTITUTIONAL RANKING FRAMEWORK

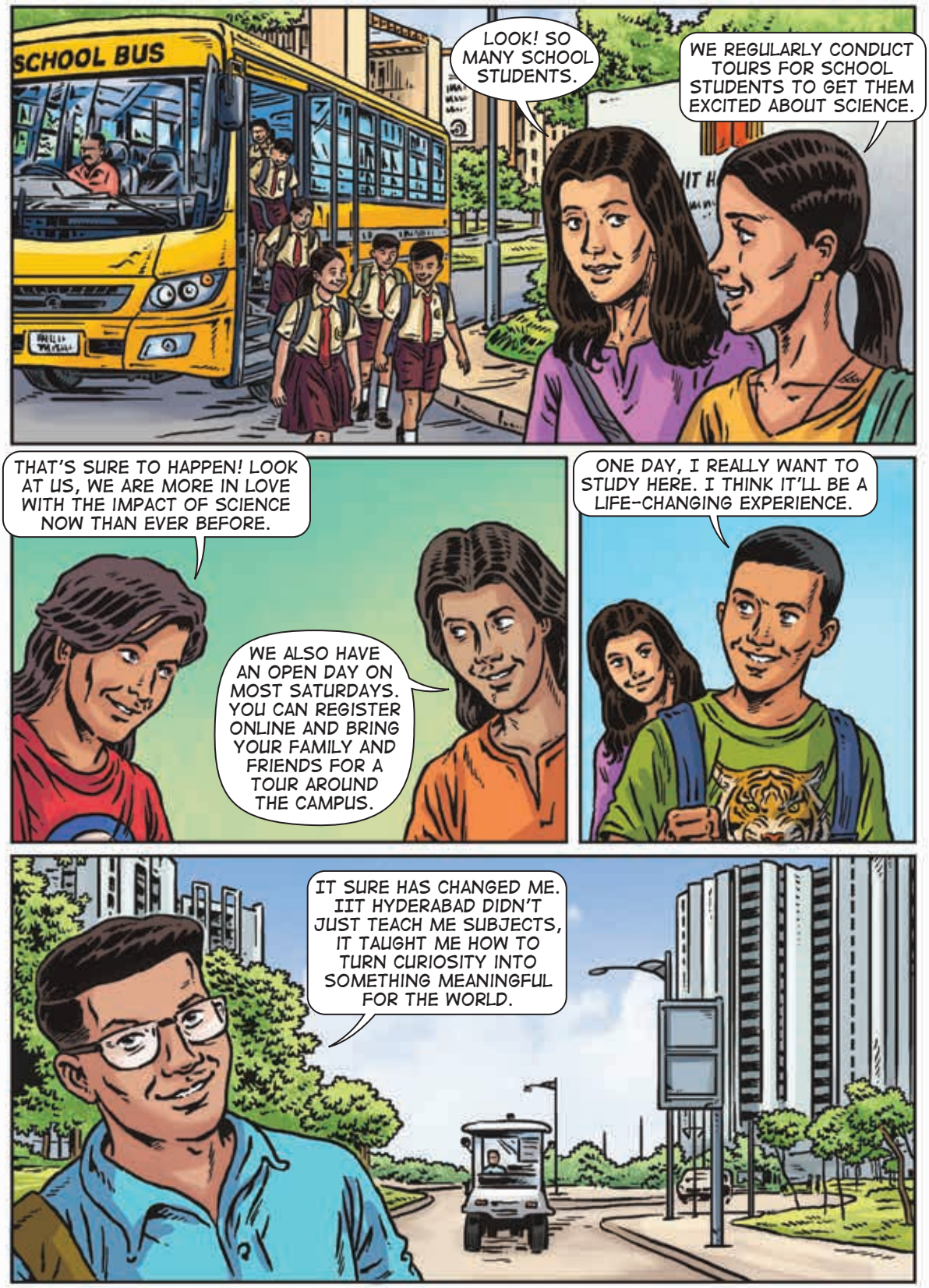

BHARATI IS PART OF A BROADER STRATEGY TO POSITION THE INSTITUTE AS A HUB FOR DEEP-TECH RESEARCH AND INNOVATION TO MEET THE COUNTRY'S VISION OF VIKSIT BHARAT@2047.
IT ALSO PROMOTES *ATMANIRBHAR* BHARAT BY ENCOURAGING INDIGENOUS INNOVATION SUCH AS THE SUPERSONIC LIGHT GAS GUN DEVELOPED BY FIRST-YEAR STUDENTS.
THERE IS ALSO A HUGE FOCUS ON SUSTAINABILITY AND A COMPREHENSIVE POLICY TO TURN THE IITH CAMPUS INTO A NET ZERO CARBON CAMPUS BY 2040.
THIS MEANS THAT THE TOTAL AMOUNT OF GREENHOUSE GASES RELEASED BY THE INSTITUTE'S ACTIVITIES WILL BE BALANCED BY THE AMOUNT REMOVED RESULTING IN ZERO CARBON FOOTPRINT.
IN 2022, IITH ESTABLISHED THE GREENKO SCHOOL OF SUSTAINABILITY AND TECHNOLOGY, TO DEVELOP ACADEMICS WHO CAN TACKLE SUSTAINABILITY ISSUES, ADDRESSING WATER, WASTE, ENVIRONMENT, ENERGY AND CLIMATE CHANGE MITIGATION.
HEY, THAT REMINDS ME, I HAVE TO GO FOR THE VILLAGE OUTREACH THIS EVENING.
I'VE HEARD THAT IITH WORKED EXTENSIVELY WITH THE VILLAGES AROUND TO HELP DURING THE PANDEMIC.


THAT'S TRUE. WE MANUFACTURED AND SUPPLIED RELIEF MATERIALS TO THE VILLAGERS. NOW, WE REGULARLY PARTNER WITH LOCAL VILLAGES TO SOLVE REAL-WORLD PROBLEMS AND TEACH THE NEXT GENERATION THROUGH OUR RURAL DEVELOPMENT CENTRE.
HI, APPA!
HI, SUMIT. MEET THESE STUDENTS. THEY HAVE BEEN KIND ENOUGH TO KEEP ME COMPANY WHILE I WAITED FOR YOU!
MUTTON
HI! THANKS SO MUCH FOR KEEPING MY FATHER COMPANY.
IT'S OUR PLEASURE. WE LEARNT A LOT ABOUT OUR INSTITUTE FROM HIM.
WE SHOULD NOW CONTINUE OUR JOURNEY!
BYE!
BYE!


SO, WHAT'S OUR NEXT STOP?
THE SNCC—SPORTS AND CULTURAL COMPLEX.
WE HAVE BADMINTON COURTS, VOLLEYBALL COURTS, SQUASH COURTS, BASKETBALL COURTS, TABLE TENNIS FACILITIES AND A FULLY EQUIPPED GYMNASIUM.
WE ALSO HAVE A DEDICATED ROOM FOR CARROM AND CHESS.
THIS IS THE SWIMMING POOL AND WE HAVE COACHES TOO.
IT'S HUGE! YOU HAVE EVERY CONCEIVABLE SPORT HERE!
EVERY STUDENT CAN PLAY THEIR FAVOURITE SPORT.
COME ON, LET US SHOW YOU THE ATHLETIC TRACKS.


IT LOOKS PROFESSIONAL GRADE.
WE ALSO HAVE A CRICKET GROUND, TWO FOOTBALL FIELDS, A HOCKEY GROUND, FIVE SYNTHETIC TENNIS COURTS AND MULTIPLE VOLLEYBALL COURTS.
THIS IS TRULY A PRO-ATHLETE'S PARADISE!
LET'S NOW WALK TO OUR LAST STOP—TIHAN.
I'M EXCITED. I THINK WE'LL SEE EVEN MORE MIND-BLOWING THINGS THERE.
A FEW MINUTES LATER—
WATCH OUT!
WHOA! IS THAT THE AUTONOMOUS NAVIGATION VEHICLE?
YES. TIHAN HAS A STATE-OF-THE-ART TESTBED FOR RESEARCH AND DEVELOPMENT OF AUTONOMOUS NAVIGATION, BOTH AERIAL AND TERRESTRIAL.


TiHAN-IITH
THEY ARE ALSO DEVELOPING SURVEILLANCE DRONE SYSTEMS FOR REAL-TIME MONITORING AND DATA COLLECTION.
THIS IS KALA, AN ADVANCED DRONE WITH PRECISE PAYLOAD DROPPING MECHANISM FOR ACCURATE DELIVERY AT TARGET LOCATIONS. IT CAN BE USED FOR MILITARY AND OPERATIONAL NEEDS.
SO COOL!
I CAN'T BELIEVE SO MUCH HAPPENS HERE. FOR INNOVATION, THIS IS TRULY ONE OF THE BEST PLACES TO BE.
MY MOTHER WOULD HAVE LOVED TO STUDY HERE. SHE LOVES ELECTRONICS AND HAS MADE MANY SMALL INNOVATIONS AT HOME.
SHE CAN STILL STUDY HERE THOUGH OUR OPEN-TO-ALL PROGRAMME. THEY OFFER MANY COURSES AND ON THE COMPLETION OF CREDITS, SHE WILL GET A CERTIFICATE FROM IITH.
THAT'S GREAT! I'LL SURELY TELL HER ABOUT THIS.


SCHOOL BUS
LOOK! SO MANY SCHOOL STUDENTS.
WE REGULARLY CONDUCT TOURS FOR SCHOOL STUDENTS TO GET THEM EXCITED ABOUT SCIENCE.
THAT'S SURE TO HAPPEN! LOOK AT US, WE ARE MORE IN LOVE WITH THE IMPACT OF SCIENCE NOW THAN EVER BEFORE.
WE ALSO HAVE AN OPEN DAY ON MOST SATURDAYS. YOU CAN REGISTER ONLINE AND BRING YOUR FAMILY AND FRIENDS FOR A TOUR AROUND THE CAMPUS.
ONE DAY, I REALLY WANT TO STUDY HERE. I THINK IT'LL BE A LIFE-CHANGING EXPERIENCE.
IT SURE HAS CHANGED ME. IIT HYDERABAD DIDN'T JUST TEACH ME SUBJECTS, IT TAUGHT ME HOW TO TURN CURIOSITY INTO SOMETHING MEANINGFUL FOR THE WORLD.

What happens when curiosity meets cutting-edge technology?
At the Indian Institute of Technology in Hyderabad (IITH), it opens up a universe of possibilities.

Established in 2008, IITH has grown into a hub of innovation, research and discovery spread across a sprawling 600-acre campus.

Join four students from Nalanda Grove School as they explore the campus and discover what makes this institute special. See driverless cars at TIHAN, explore how ITIC helps turn bold ideas into start-ups and learn about the Technology Research Park that brings people together to solve real-world problems. From pioneering programmes in artificial intelligence and biomedical engineering to advances in 5G and 6G technology, IITH is constantly pushing the boundaries.

Here, learning goes far beyond classrooms and laboratories. Free electives let students explore subjects across disciplines, while over 50 clubs offer opportunities to pursue different interests. Add hands-on projects, world-class sports facilities and international collaborations, and there is always something new to discover. Curious to see what the future looks like? Join the students on an exciting journey through IIT Hyderabad, where ideas take shape, innovation knows no boundaries and every discovery leads to endless possibilities!



ISBN 978-93-6127-212-7