

PITSTOP!

AN INSIGHT INTO THE EVENTFUL PISTON CUP



SMME PISTON CUP

THINK. CREATE. LEAD. THAT'S NUST.

The SMME Piston Cup (SPC) was born in the heart of an adrenaline-pumping auto show, where the roar of engines, the thrill of high-speed races, and the spirit of true champions electrified the air. In 2022, we envisioned an experience like no other, bringing the world of SAE Baja to NUST, but with our own unique twist that set us apart from the ordinary.

From its inception, the SPC has captured the hearts of spectators, evolving into a massive success over the years. The secret behind its triumph lies not only in the brilliance of its concept but also in the unwavering dedication of its team and the invaluable support of NUST and RIC. Nestled in the heart of SMME, funded by the Research and Innovation Centre (RIC), the event unfolds across three exhilarating days, packed with a series of intense races that feature multiple categories, each one more thrilling than the last.

Beyond the heart-racing sprints and thunderous finishes, the SMME Piston Cup (SPC) is a full-spectrum showcase of technical mastery and race-day brilliance. With the tools clanging, teams shouting, time ticking and a vibrant audience, cheering from makeshift stands, capturing moments on camera, and celebrating each heroic comeback, SPC is not just an event— it's a symphony of motion, mechanics, and madness.

If you crave the rush of high-speed competition, the electrifying atmosphere of cheering for your favorite team, and the sheer joy of witnessing a true champion rise above the rest, you've come to the right place.

Welcome to the Turbocharged world of SMME Piston Cup (SPC), where heart-pounding action, relentless ambition, and unbridled fun collide in a thrilling spectacle that's impossible to forget. Let the race begin!

BRAND LAUNCH

- 3RD OCT' 24
- SEMINAR HALL, SMME

DAY 1

- INAUGURATION
- AUTO SHOW

DAY 2

- RALLY
- RACE (TRACK)
- RACE (MUD TRAIL)

DAY 3

- INSPECTION
- ENDURANCE TEST
- CLOSING CEREMONY

THE ENGINE OF SPC, THE DRIVING FORCE



IKHTLAQ KHATTAK

ADDRESS BY FACULTY SPONSOR

It is with great enthusiasm and pleasure that I welcome you all to SMME Piston CUP. SPC is a brainchild of brilliant students and its inception has been made possible by coalescence of innovation, engineering and excitement. It has been a niche event that brings together students and individual,

keeping one singular passion in mind; Racing.

Year after year we have perfected the art of organizing it in a manner that is safe and enjoyable. This has only been possible due to the undying efforts of our brilliant team that has always worked towards seamless transition from one event to another. SPC has grown to be one of the most anticipated event of the Year and I am proud that we have not only lived up to its legacy but risen above it. I look forward to even more exhilarating, diverse and successful event this year and hope that this SPC not only exceed the expectations set by previous years but also set the bar high for future events.

To all the teams, I hope that you enjoy the event and gain valuable insight provided by the unique nature of this event. I wish you all the best of Luck and may the best racer win.



MAAZ ALI

ABOUT THE PRESIDENT

A legacy built on determination, ambition, and innovation — this was the vision that guided the leadership of the former President of the SMME Piston Cup, Maaz Ali. Under his tenure, what was once a dream became a thrilling reality: an event that seamlessly combined the spirit of engineering excellence with the adrenaline of motor-sport. The 2024 edition of SPC stood as a testament to his unwavering commitment and strategic foresight. The event was a resounding success, owing much to the exceptional organizing

committee and vice presidents he led, individuals he handpicked and mentored under his guidance. Their brilliance, coordination, and dedication reflected the culture he cultivated.

His gratitude extended to every individual who supported the event and entrusted him with the presidency. Now, as he passes the torch, he does so with full confidence in the capabilities of the incoming President and team. Their potential has his full endorsement, and he wishes them every success in upholding and advancing the legacy of the SMME Piston Cup.

Through his leadership, SPC was transformed and revolutionized into a bigger, bolder and better version of itself. His legacy as a leader will remain deeply etched in the fabric of the event for years to come.

نگہ بلند، سخن دلنواز،
جاں پُر سوز
یہی ہے رخت سفر میر
کارواں گے لیے

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Ahmad Ayub

Vice President Technical

FULL THROTTLE INTO THE SPC BRAND



This moment captures Principal of SMME delivering a passionate address, setting the stage for what SPC represents — innovation, unity, successful collaboration and a need for speed.

Our Faculty Sponsor commands the room, launching the brand with powerful words of admiration. He speaks not just about cars, but about community, creativity, and commitment. The vibrant red reflects the fiery spirit of SPC's aims to ignite.



The roar of engine, screech of tire and the hail of victory. Embodying the flame of innovation, the trophy of glory and the vigor of champions, presenting the brand logo of SPC in all its valor. It is a testament to the emotions roused while racing, while competing to bring innovation to the world of motorsports,

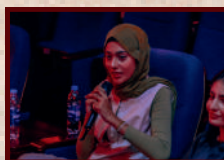
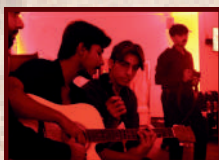


NEW BRAND, HOT WHEELS, BIG THRILLS

A high-speed lineup of thrilling activities fueled the success of our brand launch, with the OC fully charged and brimming with excitement the SPC season officially roars to life!



A glimpse into the distinguished audience, where faculty and guests of honor witness the student-led vision come to life. Their attentiveness reflects both curiosity and pride a generational bridge of mentorship and support. This moment cements SPC's legitimacy as more than just a student event; it's a movement backed by leadership.



The hype of SPC brand launch comes from the high-octane excitement of unveiling a new event defined by speed and innovation to all. It's about fueling anticipation, telling a thrilling story of power and performance, and inviting guests and OC to join the launch, which has a logo reveal, Musical performance, and speeches, invigorating the audience with the profound purpose of an event as unique as the SPC.



THEME DINNER- BEFORE THE FINAL LAP WE MADE A MEMORY

Some moments aren't about the noise. They're about the people. The SPC theme dinner was exactly that a quiet evening tucked into the heart of SMME, where the team finally stepped out of their roles and into a space of shared celebration. Laughter replaced logistics, conversations replaced commands. For a few hours, the race paused and the people who powered it became the story.

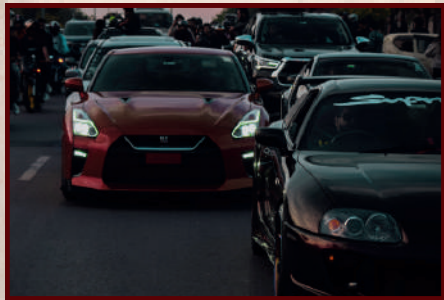
As the engines cooled and the stars took center stage, the SPC family gathered under glowing lights for a night unlike any other. The theme dinner was a well-deserved pause — a quiet celebration of chaos survived, laughter shared, and the team that made it all happen. The energy softened, the pressure melted, and for a moment, the ones who usually move behind the scenes stepped into the warmth of the spotlight. No rush, no checklists — just presence, style, and the comfort of knowing we'd built something worth pausing for.



AN AMALGAMATION OF SENSES: THE AUTOSHOW



HEARTBEATS MATCH RPMS AT THIS YEAR'S HOTTEST AUTO SHOW



The dueling titans enter the rally. In the crucible of roaring engines and screeching tires, two machines lock horns. One, blood red and brazen; the other, a dark plum cloaked in precision. Side by side, they drift into battle, smoke spiraling into the black sky like a war cry. This isn't just racing — it's a gladiator match, where rubber meets road and only style and skill survive.

The hood burns bright under the auburn sun, like a phoenix forged in metal, this beast glows under streetlamps with an amber flame. Its stance is low, wide, and unrelenting a predator poised for the chase. The matte-orange paint drinks in the spotlight while its blacked-out wheels whisper promises of control and chaos. Every inch a declaration of raw power with a hint of rebellion.



The music weaves along with blare of horns the roar of engine and the screeching of tires as the riders flaunt their vehicles. The audience watches, holding their breath, for in the world of speed, thrill and revolution, few will come out victorious but no one leaves unchanged. The sleek curves reflect the rays of the setting sun in the backdrop of a night that is going to be permeated with thrill, rush, and adrenaline-fueled excitement. Leading the rally, a sweet combination of elegance meeting style in a marriage of revolution. The revving of the engine matches the thrumming of hearts as the most anticipated event of the year is about to start.



She is deadly beauty, she is merciless grace, and she stares with ambition, as the engine roars and in raptures stands the audience. She gently laps the track, knowing the power she holds and the tires that screech to her command. The past colliding with the present in a beauty that is synergistic and awe inspiring.



Legends Never Die. A classic reborn, this vintage beauty revs with the spirit of old-school grit and modern might. The white metallic gleam illuminates the elegance that shimmers within and the unrivalled strength that brims with something old and something white. The modified hood holds an engine so powerful it is a beast of engineering finesse, unrivalled strength and speed with the endurance that would put ancient monsters to shame. A relic of the past, no, a machine of reverence resurrected back to life. The silver in the tire's rims gleam and this roadster embodies the quirk SPC is known for, the underlining streak of rebellion the SPC's auto show is infamous for. You will see a rally of pristine, new gen cars and hybrids with the restored retros meshing in one seamless drift.



NCLS: THE OCTANE YARD

The theater of dreams, where dreams align closely with reality. Where boys become men. Cars enter the yard but leave as status symbols. Few get the honor of entering the yard, but those who do never forget. Here, cars aren't just vehicles; they're extensions of their drivers' identities—tuned, modified, and crafted to perfection. Each paint job, each custom part, each roar from the exhaust tells a tale of countless hours, sweat, and sacrifice. Those who enter the yard carry the legacy of countless legends before them, and as they carve smoke into the night, they too become part of that eternal narrative. The Theater of Dreams is where passion meets performance, where skill meets spectacle, and where dreams don't just align with reality—they ignite it.

The Final March: A fleet of thrill-seekers chase twilight, chasing speed, chasing the glory only the Octane Yard offers. The winner is among them. Will you be one of the reigning champions?



DAY 2: UNTAMED POWER MEETS RUGGED EARTH



INSPECTION TEST

Judgment Zone: Where Steel Meets Scrutiny. Before the engines roar and tires meet the track, every machine must prove its worth in the inspection zone, an area where tension hums louder than exhaust. Judges scan each car like surgeons, hunting for flaws, safety gaps, or rule-bending tweaks. Here, precision is non-negotiable, and even the smallest oversight can end a team's race before it begins.

ACCELERATION

Zero to Glory in Seconds. In the blink of an eye, rubber scorches asphalt as racers blast off the line. The acceleration test is a raw display of torque, tuning, and nerve — where milliseconds decide supremacy. When time, velocity, and distance come together in a glorious combination. It's not just about speed; it's about explosive power and flawless gear shifts under pressure. One stutter, and the lead vanishes in a puff of elevating smoke.



PIT STOP

Fast Hands, Faster Comebacks. In the chaos of racing, the pit stop is a moment of controlled madness. Tires fly, spanners spark, and every second bleeds urgency. Behind each quick fix is a team that moves like clockwork, racing against time. It's where preparation meets pressure in a blur of adrenaline, quick changes, and oil.



MANEUVERABILITY

Every Turn, a Treacherous Test. In this test, speed takes a backseat and skill takes the wheel. Tight corners, unforgiving turns, and a maze of cones await in the maneuverability challenge. Drivers must dance with the track, inch-perfect, throttle-sensitive, and razor-sharp. It's a true test of human-machine harmony.



SUSPENSION TEST

Bounce-Proof or Breakdown Bound? Bumps, dips, and bone-rattling jolts, welcome to the suspension test, where shocks are the unsung heroes. This course doesn't just challenge the car; it questions the soul of its design. Only the perfectly tuned survive without scraping, bouncing, losing control, or toppling over. Comfort meets combat on this punishing terrain.



AUDIENCE

Fueled by Fans, Driven by Roars: With sweaty faces, roaring chants, and phones held high, the audience becomes a beating drum beckoning the teams to glory. Their energy is infectious, their excitement unfiltered. They cheer for underdogs, celebrate clean drifts, and gasp at close calls. Their presence turns a race into a spectacle. At an event like SPC, the audience is unmatched, wild, and free.

INSPECTION AREA

The Calm Before the Storm. Quiet yet tense, the inspection area is where reputations are made or broken — not by speed, but by scrutiny. Judges lean in with sharp eyes and sharper standards, while teams hold their breath. It's the prelude to glory or disqualification, the stakes are high and the silence is deafening.



GRADEABILITY

Climb or Crumble: The Uphill Battle Begins. Can your machine conquer the climb? The grade ability test pits horsepower against gravity on an unforgiving incline that exposes the soul of every drivetrain. It's a slow, brutal tug between traction and torque, and the hill never lies. Only the strongest engines and smartest builds make it to the top without choking.

TRACTION

Grip It or Slip It. When the ground turns wild, only grip saves glory. In the traction test, cars wrestle with slippery patches, dirt runs, and unpredictable surfaces that laugh in the face of brute force. Control, balance, and tire choice make or break the moment — it's where finesse beats fury.



REPAIRS

Wrench Time: Rebuild. Refire. Repeat. Every battle leaves scars, and between heats, the marshalling area becomes a battlefield hospital. Bent suspensions, leaking fuel lines, shredded tires, nothing goes ignored. Huddled over their wounded machines, teams become surgeons and saviors, determined to bring their rides back from the brink of death and themselves from the loss of glory.



DAY 3

ABOUT THE WINNERS

It is an excellent opportunity for everyone in Pakistan. It was time when nothing was available for automobile enthusiasts and gearheads. They were obliged to test their skills in small-scale, not very beneficial competitions. But now the sun has started to rise for all of us, and it is for us to put our maximum effort into it and make this competition and ourselves rise to the utmost possible heights.

"If learning by doing had a name, it would be Piston cup." Let's have a dive into our journey towards building our dreams. We, as a team, decided to take part in SPC so that we could put to the test what we had learned in the classroom. A vehicle designed by us, manufactured by us, and driven by our soul. All started by designing the car in a computer. A virtual car that you could look at and daydream all day. A piece of art that an artist portrays with his gentle fingers. Putting colour into an empty canvas or shoulder rather say putting soul into the dead. Next was the manufacturing phase, where every step taken was never known of before. Every single weld, every single bend, and every single cut not easing anything but making it tougher every time. A car doesn't build by itself nor by money but is built at the cost of blood, sweat, and tears. Every sleepless night and every heartbreaking mistake eventually paved the way to success. We got broke every day, but even this could not extinguish the burning fire of self-determination. At last, i would say that Team Silver Arrow lost on day 1. But on day 2, we were winners because we learned from our mistakes.

GHAM-E-AASHIQI TERA SHUKRIYA,

HUM KAHAN KAHAN SAY GUZAR GAYE



RUNNER UPS

The runner-up in the SMME Piston Cup is often the unsung hero of the race, a competitor who pushes their limits, race after race. While the winner gets the glory and the trophy, the runner-up's journey is filled with incredible skill, perseverance, and a never-give-up attitude. Despite finishing second, their performance showcases unwavering determination, often marked by near-miss moments and intense rivalries that make the competition so exciting. While they might not take home the grand prize, the runner-up is a testament to what it takes to consistently perform at the highest level, even when the finish line is just out of reach. It's a story of resilience, showing that sometimes, the true victory lies in the relentless pursuit of excellence.

2ND RUNNER UPS

Taking the second runner-up position, the team impressed both judges and spectators with their innovative approach and well-executed race strategy. Their vehicle performed consistently throughout the event, demonstrating reliability, speed, and solid technical performance. Smart decisions on race day and efficient management of resources gave them a clear competitive advantage. Their performance stands as a testament to their technical abilities. Their strong podium finish reflects months of hard work, teamwork, and a shared commitment to excellence—driven by trust, preparation, and a passion for racing.



THE FUELERS TO THE FIRE

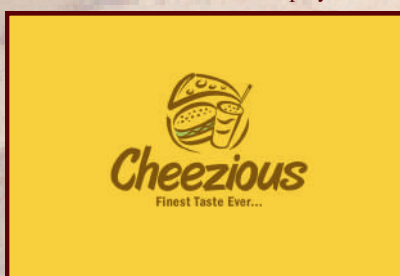


“We win and lose together”. This was said by 7-time F1 world champion Lewis Hamilton. And in rain of anguish and uncertainty, it was the entire team that stood up and delivered. Whether it was the Team Principal, the Chief Strategist or the pit stop crew, each member worked tirelessly to ensure that the checkered flag waved smoothly. A silent ovation to each and every member of the 2024 SPC OC.

THE SOULS OF SPC: OUR SPONSORS

CHEEZIOUS

If the event was a feast, it was probably due to Cheezious. Like SPC, Cheezious had its humble beginnings before exploding onto the main stage. Starting off as a single branch in Lahore in 2012, Cheezious has rapidly expanded to become a household name, just like SPC. Be it starters, cheezy treats or somewhat sooper, Cheezious sure turns up the heat with its vast array of pizza options. The iconic yellow logo is something that is easily identifiable. And by partnering with SPC, Cheezious has displayed that they know promise when they see it. The entirety of SPC would like to thank Cheezious for its unwavering support that made the event hot and spicy.



UNITED TYRES

Red bull might give you “wings”, but United tyres give you.....tyres. But jokes apart, united tyres was clinical in making SPC fly. Their support, ranging from technical expertise to wheel knowledge, was critical. Tires have a drivers back, whether it is matching the grit of the track or inching to glorious victory on only three of them. United tyres was vital in ensuring that we didn't put wet tyres on a dry track. United tyres helped us keep our cars on track throughout the entirety of the race. The team fit our needs perfectly in every aspect and aided us in ensuring nothing fell apart. A huge thank you to United tyres for their support.

ASME

SPC was a monumental achievement of mechanical mastery. And who else could have been a massive aide in this but American Society of Mechanical Engineers (ASME)? Established in 1880, ASME is a not-for-profit membership organization that promotes skill development and collaboration in the world of engineering. Spanning 130+ countries and exceeding 72,000+ members, ASME is a hub of knowledge and resources, replete with publications, courses and certifications. To pull off an event of SPC's stature, the support of an organization of ASME's nature was pivotal. ASME brought experience, recognition and legitimacy to SPC. And as vehicles of magnificence made lap after lap around the ring of fire, it became clear why ASME was crucial in making SPC a rousing success.



PINNACLE OF PRESIDENCY

HE WAS THERE IN 2023. HE WAS THERE IN 2024. AND HE SHALL BE HERE IN 2025. BORN IN SMME. WEATHERED THE STORMS, SAW OUT THE SMOKE. AND NOW HE STANDS, ON TOP OF THEM ALL.

PRESIDENT ASJAD ALI IS SET TO MAKE SPC 25 THE GREATEST EDITION OF THE PRESTIGIOUS SERIES. HAVING BEEN WITH THE FRANCHISE SINCE ITS INAUGURAL EDITION IN 2023, SERVING AS DIRECTOR ADMIN EVENTS, ASJAD HAS STEADILY CLIMBED THE RANKS WHILE LEARNING THE GAME THOROUGHLY. SPC 23 SAW HIM AS VICE PRESIDENT OPERATIONS AND NOW HE TAKES OVER THE REINS. HIS ROLE IN ENSURING SPC 23 AND 24 WERE A ROUSING SUCCESS CAN NOT BE UNDERSTATED. BEING A STUDENT OF SMME AND WELL-VERSED IN THE WORLD OF THRILLING RACING, ASJAD AND THE TEAM IS READY TO MAKE SPC 25 WORTH THE HYPE!



Asjad Ali

PRESIDENT

رفقار کی قیادت، جذبے کی پہچان

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