

# राजस्थान तकनीकी विश्वविद्यालय, कोटा अकेलगढ़ रावतभाटा रोड, कोटा. 324010

फोन ((0744)-2473003 फेक्स (0744)-2473033

क्र0: एफ(2)/37/विद्या परिषद-28/2019/ 4594-622

दिनॉकः 9.7. 2019

प्रो. नीलिमा सिंह, कुलपति, राजस्थान तकनीकी विश्वविद्यालय, कोटा / श्री वैमव गालिरया (आई.ए.एस.) शासन सचिव, तकनीकी शिक्षा, राजस्थान सरकार, जयपर /

प्रो. आर. श्रृंगी, प्रोफंसर, मैकेनिकल इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा प्रो. संजीव मिश्रा, प्रोफंसर, मैकेनिकल इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. एस.सी.जैन, प्रोफंसर, कम्प्यूटर इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. एस.के राठौर, प्रोफंसर, मैकेनिकल इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. अनिल के माथुर, प्रोफंसर, सिवल इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. अनिल के माथुर, प्रोफंसर, सिवल इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/श्री डी.एस. यादव, निदेशक, प्राविधिक शिक्षा मण्डल, डब्ल्यू-६, रेजीडंसी रोड, जोधपुर/प्रो. के.एस. महाजनी, आयोजन स्कूल ऑफ आर्की टैक्चर, आईएसआई-4, रीको इंस्टीट्यूशनल ऐरिया, सीतापुरा, जयपुर/प्रो. विवाकर शर्मा, प्रोफंसर, एवईएएस विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. सीनापुरा, जलस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. की.पी.सुनेजा, प्रोफंसर, सिविल इंजी. विभाग राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. एन.के.जोशी, प्रोफंसर, मोदी इंस्ट्रीट्यूट ऑफ मैनेजमंट एण्ड टेक्नॉलोजी, दादबाडी, कोटा/डॉ प्रो. आर.एस. मीना, इलेक्ट्रीनिक्स एण्ड कम्यूनिकेशन विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. पी. वी० पी० सिंह, प्रोफंसर, एम.एल.वी.टी. भीलवाडा (राज.)/प्रो. डी.के. पलवित्या, प्रोफंसर, विद्युत इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. संजय बंसल, प्रोफंसर, विद्युत इंजीनियरिंग विभाग, कॉलेज आफ इंजीनियरिंग एण्ड टेक्नॉलोजी कश्चीद्यालय, उदयपुर।/प्रो. संजय बंसल, प्रोफंसर, विद्युत इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, केटा/प्रो. पर्पाप कुमार अग्रवाल, प्रोफंसर, इलेक्ट्रोनिक्स एंड कम्यूनिकेशन इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. प्रोमाम, स्वान्य, प्रोफंसर, विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. प्रोमाम कुमार विजय, प्रथि,प्रो, सी.पी.पुन, प्रोफंसर, कम्प्यूटर इंजीनियरिंग विभाग, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. प्रोमाम, स्वान्य, प्राफंसर, कम्प्यूटर साईन्य विभाग, कोटा/प्रो. प्रोम कुमार विजय, प्रथि,प्राम, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. प्रोमाम, राजस्थान तकनीकी विश्वविद्यालय, कोटा/प्रो. प्रोमाम, राजस्थान तकनीकी वि

विषय : विद्या परिषद की 28वीं बैठक के कार्यवाही विवरण भिजवाने हेतु

महोदय,

राजस्थान तकनीकी विश्वविद्यालय, कोटा की विद्या परिषद की 28वीं बैठक दिनांक 02.07.2019 को सम्पन्न हुई थी। उक्त बैठक के कार्यवाही विवरण अंतिम रूप से जारी कर आपको प्रेषित किये जा रहे है।

संलग्नः उपरोक्तानुसार

भवदीय

कुल्मिचिव एंव सदस्य सचिव, विद्या परिषद

### राजस्थान तकनीकी विश्वविद्यालय, कोटा



## -: विद्या परिषद :-कार्यवाही विवरण

बैठक संख्या

28वीं बैठक

स्थल

कुलपति सचिवालय का सभा कक्ष,

राजस्थान तकनीकी विश्वविद्यालय,

कोटा

दिनांक

: 02 जुलाई, 2019 (मंगलवार)

समय

: प्रात : 11.00 बजे

### Minutes of 28th Academic Council Meeting held on 2nd July, 2019 at 11.30 AM

The following were present:

#### Following members could not attend the meeting:

1	Sh. Vaibhav Galariya	Member
2	Sh. D.S. Yadav	Member
3	Prof. R. Shringi	Member
4	Prof. A.K. Chaturvedi	Member
5	Dr. Brijesh Tripathi	Member
6	Prof. K.S. Mahajani	Member
7	Prof. Reena Dadhich	Member
8	Dr. Sanjay Bansal	Member

At the outset, Mrs. Sunita Daga, Registrar & Member Secretary welcomed the members of Academic Council. The meeting started after the Hon'ble Chairman along with other members lighted lamp to offer prayer to Her Holliness "Saraswati".

AC 28.01	To welcome the new members of the Academic Council and appreciation of the guidance rendered by the outgoing members.
Resolution No.28.1	Academic Council welcomes the new Chairman Prof. Neelima Singh, and new members Sh. Vaibhav Galariya, Smt. Sunita Daga, Member Secretary, Prof. Anil K. Mathur, Prof. Praveen Kumar Agrawal, Prof. C.P. Gupta, Prof. Anupam Bhatnagar, Prof. K.S. Mahajani and Prof. Yogesh Kumar Vijay.
	Academic Council appreciates the able guidance provided by the outgoing members Sh. Subodh Agarwal, Prof. N.P. Kaushik, Dr. Abha Jain, Prof. Vibhav Chaturvedi, Prof. Dheerendra Mathur, Prof. S.S. Rathore, Prof. N.S. Rathore, Prof. Anil Pathak, Dr. Swati V Chande, Prof. Rajesh Kothari and Prof. S.K. Vyas.



AC 28.02	on 1.11.2	the minutes of the 25st Academic C 2017, 26th Special Academic Council , 27th Special Academic Council	il Meeting held on
Resolution No.28.2	Academic C	es of 25 <sup>th</sup> Academic Council held on 1. Council held on 17.4.2018, and 27 <sup>th</sup> Spec ld on 12.7.2018 were confirmed.	
AC 28.03		er action taken report in compliance eting held on 1.11.2017.	e of 25 <sup>th</sup> Academic
		n reports in compliance of Academic Cou wing table for perusal of the members and	
	Agenda Item No.	Particulars	Action Taken
	AC 25.1	To welcome the new members of the Academic Council and appreciation of the guidance rendered by the outgoing members.	Seen
	AC 25.2	To confirm the minutes of the 21 <sup>st</sup> Academic Council meeting held on 19.03.2016 (Annexure-25.2.1 page No.4-11)	
		22 <sup>nd</sup> Academic Council Meeting held on 30.03.2016 (Annexure- 25.2.2 page No. 12- 29),	Confirmed
		23 <sup>rd</sup> Special Academic Council Meeting held on 7-1-2017 (Annexure-25.2.3 page No. 30-35),	
		24 <sup>th</sup> Special Academic Council Meeting held on 11.07.2017 (Annexure-25.2.4 page No. 36-48)	
	AC 25.3	To consider action taken report in compliance of 21st Academic council meeting held on 19.03.2016	Approved
	AC 25.4	To consider action taken report in compliance of 22 <sup>nd</sup> Academic council meeting held on 30.03.2016	Approved
	AC 25.5	To consider action taken report in compliance of 23 <sup>rd</sup> Special Academic council meeting held on 07.01.2017	Approved
	AC 25.6	To consider action taken report in compliance of 24th Special Academic council meeting held on 11.07.2017	Approved
	AC 25.07	To consider the panel of experts for appointment of recruitment for faculty	Approved
•	AC 25.08	To consider the Minutes of 21st Meeting of Faculty of Engineering & Architecture (FOEA) held on 26.08.2017 and 22nd meeting of Faculty of Engineering & Architecture held on 9-1-2017	Approved
	AC 25.09	To approve Ordinance & Regulations	



	AC27.1(S)	To approve the 23rd meeting minutes of faculty of Engineering & Architecture	Approved
	Agenda Item No.	Particulars	Action Taken
AC 28.05		r action taken report in complianc ouncil meeting held on 12.7.2018	e of 27 <sup>th</sup> Special
Resolution No.28.4		ers perused the action taken on vario ouncil Meeting held on 17.4.2018 and conf	
,		1 400,00 100,0001.	
		A.C. vide agenda item no. 24.1 but their names could not be included in degree register.	
	(S)(R)	To report the order of Vice-Chancellor for award of degrees to such students who have completed their course within the stipulated time decided by 24th	Approved
	AC. 26.1(S) (R)	To report the order of Vice-Chancellor for award of degrees on urgent basis with fee Rs 2000/-	Approved
	AC. 26.2(S)	To consider and approve the Chancellor's and Vice-Chancellor's Gold Medal at the 8 <sup>th</sup> Convocation of the University	
•	AC.26.1(S)	To consider and pass the grace for conferment of degrees of examination year 2017 or before of UG, PG and Ph. D. course.	
	Agenda Item No.	Particulars	Action Taken
	in the follow:	reports in compliance of Academic Councing table for perusal of the members and a	
AC 28.04		r action taken report in compliance eting held on 17.4.2018.	of 26th Academic
AC 28.04	within two m		•
No.28.3	Academic Co Further, the	ouncil Meeting held on 01.11.2017 and of members opined that the status report of many be submitted. In case the meeting has	confirmed the same f the committee (AO
Resolution	The membe	rs perused the action taken on vario	ous points of 25th
0 M.		content of syllabus.	30.12.2017and 12163-71dt. 30.12.2017(Annexure 28.3 Page No.36-38)
	4 OT 4 C	To improve number of enrolment of students in UG/PG	Vide office order n 12172-81 d 30.12.2017, 12182 90 d
		for M.Tech. Programme in Engineering & Technology	



Resolution No.28.5	The members perused the action taken on various points of 27th Academic Council Meeting held on 12.7.2018 and confirmed the same.
AC 28.06	To approve the minutes of 24th FOEA meeting held on 27.05.2019.
	Rajasthan Technical University has implemented the revised scheme and syllabus from 2017-18. In continuation, the scheme & syllabus of V & VI semester are to be implemented from 2019-20 for the students admitted to B.Tech. course in 2017-18. The scheme & syllabus for V & VI semester (to be implemented from July 2019 onwards) were put up in 24th Faculty of Engineering & Architecture (FOEA) for approval. The approved minutes of meeting of 24th FOEA held on 27.05.2019 by HVC is placed before the Hon'ble members for perusal and approval. (Attached Book No.1 Page No 1 to 581).
Resolution No.28.6	The minutes of 24th FOEA meeting held on 27.5.2019 were confirmed. The suggestions of Prof. D.K. Palwalia, BOS Convener (Electrical Engg.), as approved by HVC on dated 04.07.2019, are to be incorporated at page no.254 for the syllabus of Digital Control System (5EE5-13) of V Sem. Electrical Engineering (copy enclosed).
AC 28.07	To consider and pass the grace for conferment of degrees of examination year 2018 or before of UG, PG and Ph. D. course.
	Students who have passed their B.Tech., B.Arch., BHMCT, BBA, MBA, MCA, M.Tech., M.Arch. and Ph.D. course on or before 28th February 2019 may be considered for passing the grace for conferment of degrees in 9th Convocation.
	Therefore, the Council is requested to pass the grace for conferment of degree to B.Tech., B.Arch., BHMCT, BBA, MBA, MCA, M.Tech., M.Arch. and Ph.D. students who have cleared their eligibility on or before 28th February 2019 and also to record date of conferment of degree/ Diploma/ Gold Medals as per convocation Ordinance No. 10.
	Further, council is also requested to authorize Hon'ble Vice-Chancellor to include such students afterwards who have completed their degrees up to 28th February 2019, but their names could not included in the degree register at present.
Resolution No.28.07	Members passes the Grace for 25604 students (as per list) with addition that the last date of eligibility for Ph.D programme be kept as 02.07.2019 i.e. A.C. meeting date. Members further recommended that date to be printed on Degrees/Gold Medal as per provision of Convocation Ordinance- 10 be considered as 02.07.2019, as regular meeting of BOM may not held soon due to going on Assembly session and date of Convocation is already fixed by Hon'ble Chancellor Sir for 19.08.2019
AC 28.08	To consider and approve the Chancellor's and Vice-Chancellor's Gold Medal at the 9th Convocation of the University.
	Hon'ble Chancellor has directed vide its letter no. DO no. F1(39)RB/2016:7927 dated 28.09.2016 to institute Chancellor's Gold Medal to the topper of post graduation course in any one stream. This medal shall be awarded each year by rotation system.
	In view of Raj Bhawan direction, the compliance report was submitted vide RTU letter no. RTU/VCS/F(1)5 / 2016 dated 29.11.2016 and roaster

of rotation was also communicated.

The matter was placed before A.C. at its 24th meeting vide agenda item no. 24.3 and approved the roaster of rotation of Chancellor's Gold Medal and also decided the institution of Vice-Chancellor's gold Medal to highest topper of B.Tech. course.

This year Chancellor's Gold Medal will be awarded to overall topper of P.G Programme in Engineering and Architecture i.e M.Tech & M.Arch Programmes, who were admitted in July/August 2016 and have completed their degree upto 28th February 2019 as communicated by Dean(AA).

In 9th convocation the students eligible for award of Chancellor's and Vice-Chancellor's Gold Medal are as below:

- Chancellor's Gold Medal –
   Name of student will be available after the Final merit declaration on 25.06.2019
- Vice-chancellor's Gold Medal –
   Name of student will be available after the Final merit declaration on 25.06.2019.

### Resolution No.28.8

The list of Gold medal for Chancellor's and Vice Chancellor's were provided during the meeting were approved.

1. Chancellor's Gold Medal-

Ms. Swati Vijay- Roll No. 16EUCST617 M.Tech. Structural Engg.- Year 2018- 87.18%

2. Vice Chancellor's Gold Medal-

Ms. Jaya Mittal- Roll No. 14ELDEE025 B.Tech.- Electrical Engineering- Year 2018- 87.91%

#### AC 28.09

To consider the mercy chance to the students of B. Tech. 2011 (LEEP 2012), BHMCT 2011, B. Arch. 2009, BBA 2013, MCA 2013, MBA 2015, M. Tech. 2006 to 2015 & M. Arch. 2013 to 2015 admitted batches who have not completed their degree even after completion of double the duration of prescribed course time/permitted course duration.

Presently, the students of B. Tech., BHMCT, MCA and MBA admitted batches were given mercy chance and additional mercy chances to complete their degree as per the directions of Raj Bhawan, Academic Council and BOM, who could not pass all papers (copies of orders are enclosed).

As per University rules a student admitted in B. Tech, BHMCT, B. Arch., BBA, MCA, MBA, M. Tech. & M. Arch. course is required to complete his/her course/degree in 8, 8, 10, 6, 6, 4, 4 & 4 years duration respectively i.e. double the duration prescribed for the course.

Now, applications are received from students of afterwards batches, who could not completed their course as still one or more papers are due to complete their degree as per requirement.



In view of the above and in the interest of students, decision may be taken for granting of a mercy chance to the students of B. Tech. 2011 (LEEP 2012), BHMCT 2011, B. Arch. 2009, BBA 2013, MCA 2013, MBA 2015, M. Tech. 2006 to 2015 & M. Arch. 2013 to 2015 admitted batches who have not completed their degree even after completion of double the duration of prescribed course time. The mercy chance may be given in academic session 2019-20.

Members are requested to kindly consider the agenda and decide the matter that an additional mercy chance may be given to above batches students and exam of the same batches may be conducted separately in the academic session 2019-20, if approved.

### Resolution No.28.9

The mercy chance as proposed above was approved. However, an exit policy to be framed for the students who didn't complete their degree even after availing mercy chance(s).

#### AC 28.10

To consider the mercy chance to the students of B. Arch., B. Tech, BHMCT, MCA and MBA who have not completed their degree even after completion of double the duration of prescribed course time/permitted course duration.

Presently, the students of B. Tech. 2006 to 2009 (LEEP 2007 to 2010), BHMCT 2006 to 2009, MCA 2006 to 2011 and MBA 2006 to 2013 admitted batches were given mercy chance and additional mercy chances to complete their degree as per directions of Raj Bhawan, Academic Council and BOM, who could not pass all papers (details of orders are enclosed).

As per University rules a student admitted in B. Tech, BHMCT, B. Arch., MCA, MBA, M. Tech. & M. Arch. course is required to complete his/her course/degree in 8, 8, 10, 6, 4, 4 & 4 years duration respectively i.e. double the duration prescribed for the course.

Now, applications are received from students of afterwards batches, who could not completed their course as still one or more papers are due to complete their degree as per requirement. The session wise details of mercy chances given to students are as below:-

Sr. No	Exam. Session/ Year	Course wise Enrolment Year/Admitted Batches						
		MBA	MCA	B.Tec h.	B.Tech (LEEP)	внмст	B.Arch	Order Number
1.	2012-	2006 to 2007					-	F(23)/3.2/RTU- Exam/2010-11/ 3164-73 Dated 07.06.2012
2.	2013- 14	2008	2006				-	F(27)/3.32/Sec./RT U COE/Exam/2013/ 10401-10 Dated 28.10.2013
3.	2014- 15	2009 to 2010	2007 to 2008	2006	2007	2006		F(23)/3.2/RTU EXAM/ 2014- 15/3564-75 Dated 29.10.2014
4.	2015- 16	2006 to 2011	2006 to 2009	2006 to 2007	2007 to 2008	2006 to 2007	-	F(23)/1.1/COE/RT U-EXAM/2015-16/ 8029-47 Dated 12.03.16 & F(23)/1.1/COE/RT U-EXAM/2015-



T		<del></del>	T	7			·		
									16/77-93 Dated
									06.04.2016
	5.	2016-	2012	2010	2008	2009	2008	2006	F(23)/1.1/COE/RT
		17							U-EXAM/2016-17/
									4292-313 Dated
									28.02.2017
	6.	2017-	2013	2011	2009	2010	2009	2007	F(23)/RTU-EXAM
		18							CONDUCT/2017-
									18/5.222/9141-55
									Dated 06.09.2017
	7.	2017-	2006	2006	2006	2007	2006	2006	F(23)/RTU-EXAM
П		18	to	to	to	to	to	2000	CONDUCT /2017-
			2012	2010	2008	2009	2008		18/5.222/ 20250-
				-			2000		*68
									Dated 21.03.2018
	8.	2018-	2013	2011	2009	2010	2009	2007	
		19	86	8	&	85	&s	& 85	F(23)/RTU-EXAM
			2014	2012	2010	2011	2010	2008	CONDUCT/2017-
			2011	2012	2010	2011	2010	2000	18/5.222/9420-
									35Dated 23.08.2018
									& F(23)/RTU-EXAM
									CONDUCT/ 2018-
									19/5.222/11235-50
11			L						Dated 01.10.2018

As per above table, the students admitted in the year/session 2006 were given three mercy chance (except B. Arch.). In view of the above and in the interest of students, decision may be taken for granting of an additional mercy chance to the students of B. Tech. 2007 to 2010 (LEEP 2008 to 2011), BHMCT 2007 to 2010, B. Arch. 2006 to 2008, MCA 2007 to 2012 and MBA 2007 to 2014 admitted batches who have not completed their degree even after completion of double the duration of prescribed course time/permitted course duration.

Members are requested to kindly consider the agenda and decide the matter that an additional mercy chance may be given to above batches students and exam of the same batches may be conducted separately in the academic session 2019-20, if approved.

#### Resolution No.28.10

Not approved. The members opined that the students who have already availed the mercy chance and still couldn't clear their back papers, no further mercy chance shall be allowed to them. However, A committee consisting of All Deans of Faculties and COE shall be constituted and Dean A/A shall act as Member Secretary. The committee shall suggest the possible ways for such students for alternate degree/diploma/certificate course etc.

AC 28.01(R)) To report the office order no. RTU/F(17)CBCS/2019/338-44, dated 22.04.2019 regarding the guidelines for New Scheme Undergraduate B.Tech. Courses in Engineering & Technology.

> On the directions of 27th Academic Council held on 12.07.2018 vide agenda AC 27.1 (S) and subsequently approval of 33rd Board of Management, Choice Based Credit System (CBCS) effective from academic session 2018-19was implemented for B.Tech courses. The approved guidelines for CBCS were further streamlined for various provisions for awarding the credits as per the examination point of view were incorporated with needful changes.

> The revised guidelines were approved by HVC to notify the same and to report it in academic council. The guidelines was notified vide RTU/F(17)CBCS/2019/338-44, dated 22.04.2019 is further reported for the perusal of Hon'ble members for its approval.



Resolution No.28.1 (R)	Approved. For point no. 20 (iii), the members opined to consider SGPA of B.Tech. 8th, 7th, 6th semester in that order, in case of tie to decide the merit. However the committee already constituted by Hon'ble Vice Chancellor to decide the criteria for merit for branch change may reconsider the process and suggest the suggestions to the next Academic Council meeting.
AC 28.02(R)	To report the Amendment in Notification no. RTU/Acad./F(17)04/Branch Change/19/586-94, dated 17.05.2019 regarding the Branch Change in view of guidelines for new scheme of Credit Based Choice System implemented from session 2018-19.
	On the implementation of Choice Based Credit System (CBCS) by the University from the academic session 2018-19. The existing branch change rules notified vide $F(17)$ Acad./2010-11/9347-57, dated 17.07.2013 were amended as per the provisions of guidelines notified vide RTU/F(17)CBCS/2019/338-44, dated 22.04.2019. The amendment in Branch Change Rules has been notified vide RTU/Acad./F(17)04/19/586-94, dated 17.05.2019 with the approval of HVC and the same is reported for the perusal and approval of Hon'ble members.
Resolution No.28.2(R)	Approved with the suggestions that Credit Based Choice System may be replaced with Choice Based Credit System.
AC 28.03(R)	To report the office order no. RTU/F(17)/CBCS/2019/463-68, dated 24.04.2019 regarding guidelines for Choice Based Credit System (CBCS) to award the credit marks for Social Outreach, Discipline & Extra Curriculum Activities (SODECA).
	The Choice Based Credit System (CBCS) has been implemented by the University from the academic session 2018-19 and as per the guidelines issued vide RTU/F(17)CBCS/2019/338-44, dated 22.04.2019, the criteria to award credit marks for Social Outreach, Discipline & Extra Curriculum Activities (SODECA) has been notified, as per the approval of HVC, vide office order no. RTU/F(17)/CBCS/2019/463-68, dated 24.04.2019. The notified order is reported for the perusal and approval of Hon'ble members.
Resolution No.28.3(R)	Approved with the suggestions that Credit Based Choice System may be replaced with Choice Based Credit System.
AC 28.04(R)	To report the minutes of meeting of BOS Conveners held on 23.08.2018.
	The meeting of the conveners of Board of Studies "BOS" of B.Tech. Courses was held on 23.08.2019 to resolve theissues observed regarding the new scheme for B.Tech. program.
1960 <b>•</b> ;	The syllabus of 3 <sup>rd</sup> semester Engineering Mechanics as revised by the BOS Mechanical Engineering, on the approval of Hon'ble Vice-Chancellor has been placed at page no. 62, and was uploaded on the University website.
* A	The syllabus of Technical Communication for the 3 <sup>rd</sup> semester students has been revised in the meeting. The syllabus of Technical Communication for the 3 <sup>rd</sup> semester students, on the approval of Hon'ble Vice-Chancellor has been placed at page no. 63, and was uploaded on the



	University website.
•	Existing two BOS's BOS for 1st year and BOS (Applied Sciences) has been merged and renamed as BOS (Applied Sciences). This BOS will look after the syllabus of BSC & HSMC category courses. This office order for the BOS (Applied Sciences) has been placed at page no. 66.
	The minutes of meeting of BOS Conveners held on 213.08.2019, revised syllabus of 3 <sup>rd</sup> semester Engineering Mechanics and syllabus of Technical Communication and the office order of BOS (Applied Sciences) are reported for the perusal and approval of Hon'ble members.
Resolution No.28.4	Members seen and approved the same.
AC 28.05(R)	The state of the s
	category no.7 of the Choice Based Credit System (CBCS) guidelines as Project/Seminar/Industrial Training (PSIT).
	On the directions of 27th Academic Council held on 12.07.2018 vide agenda AC 27.1 (S) and subsequently approval of 33rd Board of Management, Choice Based Credit System (CBCS) was implemented for B.Tech courses. The approved guidelines for CBCS were further amended as per the AICTE norms to change the name of category: 7 as Project by Project, Seminar and Industrial Training (PSIT). The same has been incorporated in the guidelines for CBCS notified by the University vide RTU/F(17)CBCS/2019/338-44, dated 22.04.2019. The same is reported for the perusal and approval of Hon'ble members.
Resolution No.28.5	Members seen and approved the same.
AC 28.06(R)	To report the revised scheme & syllabus of Aeronautical Engineering of IV semester from academic session 2018-19.
	The approved scheme and syllabus of IV semester of Aeronautical Engineering was recommended for the amendment for minor necessary changes by the members of the Board of Studies (Aeronautical Engineering). The proposed changes after the approval of HVC, the amended scheme and syllabus of IV semester for B.Tech. Course in Aeronautical Engineering were notified for the students and is reported for the perusal and approval of Hon'ble members.
Resolution No.28.6	Members seen and approved the same.
AC 28.07(R)	To report the New Board of Studies (BOS)- Renewable Energy in place of BOS (Energy & Environmental Engineering) and BOS (Energy Technology).
	The new Board of Studies (BOS) for Renewable Energy has been constituted in place of existing two Board of Studies Energy & Environmental Engineering and Energy Technology. The issues of BOS's of Energy & Environmental Engineering and Energy Technology have been taken care by BOS's Civil, Mechanical and Electrical Engg., as these departments are already running M.Tech. Courses viz. Environmental Engg., Thermal Engg. and Power Electronics & Electric Drives. The approved BOS for Renewable Energy is reported for perusal and approval of the Hon'ble members.
Resolution	Members seen and approved the same. In future, to review the policy for
	or state of the policy for

No.28.7	constitution of POS
	constitution of BOS, a separate agenda shall be placed through Dear A/A.
AC 28.08(R	To report the order of Vice-Chancellor for award of degrees on urgen
	basis with fee Rs 2000/
	Following students have completed their course after the last date decided by A.C. at its meeting vide agenda item no. AC 26.1(S)(R) dated 17.04.2018, but on account of urgency HVC has approved their names for award of degree on urgent basis.
•	
	1. AKHIL KALADHARAN PANICKER 09ECAEC001 2. RUBAL PREET SINGH 14EARCS743 3. SAKSHI SUMBLY 14EJCIT077 4. SANJANA RAJ 14EAREC113 5. MD KALIM ANWAR 12ERCME032 6. HARDIK AUDICHYA 14EGICS031
Resolution No.28.8 (R)	Names of the students were placed by COE, these were seen by the members, and were approved.
AC 28.09(R)	To report the order of Vice-Chancellor for award of degrees to
	stauchts who have completed their course within the ctime 1-4-14:
•	decided by 20th A.C. Vide agenda item no 26.2 but their names
	could not be included in degree register.
	Following students have completed their assets the state of the state
	Following students have completed their course within the stipulated date decided by the Council at its meeting vide agenda item no. AC
•	120.10011 ualtu 11.04.2018. Dill their names could not include 1.1.
	degree register due to non-updation of data by college concerned and student also within the stipulated period.
	After successful updation of degree data, HVC has permitted to include their names in 8th convocation data and award of degrees.
Resolution No.28.9	Members seen and approved the same.
AC 28 T.1	To consider and approve the rule to decide order of merit in M.Tech.
	& M.Arch. Course.
	As per direction of Hon'ble Chancellor regarding institution of Chancellor's Gold Medal at P.G. level course, RTU has approved and decided the roaster of rotation for Chancellor's Gold Medal. As per roaster, Chancellor's Gold Medal is to be awarded for this year to overall
	topper of PG programme in M.Tech. & M.Arch. taken together. The rules for determining order of Merit for pass out batches of this session (2017-18) in M.Tech. & M.Arch. courses are annexed for consideration of Hon'ble members.
	Further, only one Gold Medal is to be awarded this year to overall topper of M.Tech. & M.Arch. programme taken together instead of each specialization.
esolution o.28.T.1	The members seen and approved.
	To consider and approve the formats of degree.
	Formats of degree of M. Tech, and MBA courses for University D
,	Rajasthan Technical University, Kota are placed before the council for



	As per order no. 3980-91 dated 30.05.2015 the functioning of University College of Engineering, Kota was ceased and all activities were transferred to Rajasthan Technical University, Kota. To run Academic activity, University Departments, RTU, Kota, are in working and documents are
	issued in the name of the same. Office order no. 3154-60 dated 04.06.2019 was issued for the purpose.
Resolution No.28.T.2	Format of Degree containing the name of college as University Department (as per existing record/orders) is approved.
	However, members were of the opinion that regarding the name of college i.e. University Department V/s University College of Engineering, the matter may be put up before the BOM for review as per provisions of act.

(Prof. Neelima Singh)

Chairman

(Smt. Sunita Daga) Member Secretary

### NOTE SHEET

Date: 03/07/2019

Subj-Regardin, Sylethus of B. Trech

Electrical Engy I Sem SEE S-12- Digital

Combod System

Ref: - 28th Academic Council meeting

With reference to subject; the syllabres

Her B. Tech Electrical Engy, semester

I Subject Code SEES-13. Subject

mame: Disital Control System have

misprint. The Cornected syllating

in enclosed

It is proposed to approve the Correction.

Submitted for approval Pl

Dr. D. K. Palevalia Bas (EE) - Convener RTV, Kota

Dem (F.A.)

The proposed correction may be approved.

Ani

Wonder 19/19



### RAJASTHAN TECHNICAL UNIVERSITY, KOTA

**SYLLABUS** 

3rd Year - V Semester: B.Tech. (Electrical Engineering) 5EE5-13: DIGITAL CONTROL SYSTEM

Credit: 2

Max. Marks: 100(IA:20, ETE:80)

2L+0T+0P

End Term Exam: 2 Hours

S.No.	CONTENTS	CONTACT
1	Introduction: Objective, scope and outcome of the course.	1
2	Discrete Representation of Continuous Systems  Basics of Digital Control Systems. Discrete representation of continuous systems.  Sample and hold circuit. Mathematical Modelling of sample and hold circuit. Effects of Sampling and Quantization. Choice of sampling frequency. ZOH equivalent.	05
3	Discrete System Analysis Z-Transform and Inverse Z Transform for analyzing discrete time systems. Pulse Transfer function. Pulse transfer function of closed loop systems. Mapping from splane to z plane. Solution of Discrete time systems. Time response of discrete time system.	05
4	Stability of Discrete Time System Stability analysis by Jury test. Stability analysis using bilinear transformation. Design of digital control system with dead beat response. Practical issues with dead beat response design.	05
5	State Space Approach for discrete time systems State space models of discrete systems, State space analysis. Lyapunov Stability. Controllability, reach-ability, Reconstructibility and observability analysis. Effect of pole zero cancellation on the controllability & observability.	04
б.	Design of Digital Control System  Design of Discrete PID Controller, Design of discrete state feedback controller.  Design of set point tracker. Design of Discrete Observer for LTI System. Design of Discrete compensator.	04
7	Discrete output feedback control Design of discrete output feedback control. Fast output sampling (FOS) and periodic output feedback controller design for discrete time systems	04
	Total	28

Sup3 47/19



### RAJASTHAN TECHNICAL UNIVERSITY, KOTA

SYLLABUS

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4	Stability of Discrete Time System Stability analysis by Jury test. Stability analysis using bilinear transformation. Design of digital control system with dead beat response. Practical issues with dead beat response design.	05
5	State Space Approach for discrete time systems State space models of discrete systems, State space analysis. Lyapunov Stability. Controllability, reach-ability, Reconstructibility and observability analysis. Effect of pole zero cancellation on the controllability & observability.	04
6.	Design of Digital Control System  Design of Discrete PID Controller, Design of discrete state feedback controller.  Design of set point tracker. Design of Discrete Observer for LTI System. Design of Discrete compensator.	04
7	Discrete output feedback control  Design of discrete output feedback control. Fast output sampling (FOS) and periodic output feedback controller design for discrete time systems	04
	Total	28

Bra/2/19



## RAJASTHAN TECHNICAL UNIVERSITY, KOTA

राजस्थान तकनीकी विश्वविद्यालय,कोटा

Phone: +91-744-2473108, 0744-2473014, examdegreecell@rtu.ac.in

### Coursewise Details of Degrees to be Confer in IX Convocation

COURSE	NO. OF DEGREES
B.ARCH.	180
BBA	32
BHMCT	17
B.TECH.	22284
MBA	1553
MCA	872
M.TECH.	643
M.ARCH.	8
Ph.D	15
TOTAL	25604

(Prof .A.K.Dwivedi) Controller of Examinations